

PROCEEDINGS
OF THE
AMERICAN SOCIETY
OF
CIVIL ENGINEERS

(INSTITUTED: 1852)

VOL. XLIII

JANUARY TO DECEMBER, 1917

NEW YORK:
PUBLISHED BY THE SOCIETY

1917

LIBRARY OF CONGRESS



AMERICAN SOCIETY

CIVIL ENGINEERS

Entered according to Act of Congress, by the AMERICAN SOCIETY OF CIVIL ENGINEERS,
in the Office of the Librarian of Congress at Washington.

VOL. XLIII

DEPARTMENT OF THE INTERIOR

THE JOURNAL

PUBLISHED BY THE SOCIETY

1911

NOTE.—This Society is not responsible for any statement made or opinion expressed
in its publications.

INDEX

ABRAMS.

- ABRAMS, D. A.—Discussion by, 70.
 Accessions to the Library, 24, 153, 210, 263, 354, 436, 541, 612, 771.
 ACKER, ROBERT LOUIS.—Elected an Associate Member, 755.
 AIKENHEAD, JAMES RAY.—Transferred to Grade of Member, 757.
 ALBER, HARRY CONRAD FRANCIS.—Elected a Junior, 757.
 ALDEN, JOHN FERRIS.—Death announced, 199.
 ALDERMAN, ERNEST SAMUEL.—Transferred to Grade of Associate Member, 72.
 ALLAN, FREDERICK WILLIAM.—Elected a Member, 580.
 ALLAN, WILLIAM SELBY.—Transferred to Grade of Associate Member, 757.
 ALLEE, DAVID ARTHUR.—Elected a Member, 308.
 ALLEN, FRANKLIN REA.—Transferred to Grade of Associate Member, 636.
 ALLEN, HENRY STANLEY.—Elected an Associate Member, 634.
 ALLEN, JAMES.—Elected a Member, 634.
 ALLEN, RALPH BENJAMIN.—Elected an Associate Member, 246.
 ALLISON, JOSEPH CHESTER.—Transferred to Grade of Member, 401.
 ALVORD, JOHN W.—Appointed a Member of the Board of Direction, 642.
 American Engineering Service Committee.—Statement of, Relative to Civil Engineers for War Service, 644, 665.
 American Engineering Standards.—Appointment of Representatives of Society to Joint Conference on, 74; Report of Joint Committee on Organization of Committee on, 414.
 American Engineers in Russia and South America, Committee to Investigate and Report on Opportunities for.—Appointment

AMERICAN.

- of, Referred to Board of Direction, 68, 103; Report of Committee on Special Committees Relative to Appointment of, 405, 639.
 American Institute of Electrical Engineers.—Letter from, Relative to Privileges of Members' Rooms at Annual Meeting, 68, 109; Telegram from, To President of the United States, Supporting International Policy and Offering Assistance toward Organization of Engineers for Service, 135.
 American Institute of Mining Engineers.—Letter from, Relative to Privileges of Members' Rooms at Annual Meeting, 68, 110; Telegram from, To President of the United States, Supporting International Policy and Offering Assistance toward Organization of Engineers for Service, 135.
 American Museum of Safety.—Invitation from, 1.
 American Society of Civil Engineers.—Telegram from, To President of the United States, Supporting International Policy and Offering Assistance toward Organization of Engineers for Service, 135.
 American Society of Mechanical Engineers.—Letter from, Relative to Privileges of Members' Rooms at Annual Meeting, 68, 110; Telegram from, To President of the United States, Supporting International Policy and Offering Assistance toward Organization of Engineers for Service, 135; Letter from, Relative to Appointment of Representatives to Assist in Framing Code for Testing of Water Wheels, 644.
 AMMANN, O. H.—Paper by, 753.
 "An Aerial Tramway for the Saline Valley Salt Company, Inyo County, California," presented and discussed, 310.

ANDERSON.

- ANDERSON, HOWARD ROYSTON. — Elected an Associate Member, 246.
- ANDERSON, JOHN EDWARD. — Transferred to Grade of Associate Member, 310.
- ANDERSON, ROY LEONARD. — Elected a Junior, 400.
- ANDREEN, GUSTAF BIRGER. — Elected an Associate Member, 634.
- ANDREWS, DANIEL MARSHALL. — Death announced, 637.
- ANDRUS, VINCENT RICHARDSON. — Elected an Associate Member, 755.
- Announcements, 5, 140, 200, 252, 344, 418, 531, 603, 680, 761.
- Annual Convention, 49th. — Time and Place Announced, 252; Appointment of Committee of Arrangements for, 252; Abandonment of, 344, 639.
- Annual Meeting. — Minutes of, 65, 77; Resolutions of Thanks Adopted at, 68, 110; Excursions and Entertainments at, 113; Attendance at, 114; Committee of Arrangements for, 761.
- ANSON, WILLIAM FREDERICK ALFRED. — Death announced, 2.
- Architects, Licensing of. — Letter from, and Resolution by, San Diego Association Relative to Proposed Bill for, In California, 313, 341; Text of Proposed Bill for, In California, 334.
- ARDERY, EDWARD DAHL. — Elected an Associate Member, 70.
- ARELLANO Y GONZALEZ DE MENDOZA, ADOLFO RAMIREZ. — Elected a Junior, 248.
- AREND, ALBERT CORNELIUS. — Transferred to Grade of Member, 72.
- ARMS, LEO MURRY. — Elected a Junior, 582.
- ARMSTRONG, HARRY ARTHUR. — Transferred to Grade of Associate Member, 72.
- ARMSTRONG, MERWIN. — Elected an Associate Member, 70.
- ARNOLD, WILLIAM HARRY. — Death announced, 530.
- ARONESCU, LEON. — Elected a Junior, 71.
- ASHKINS, NATHAN THOMAS. — Elected a Junior, 71.

ASHTON.

- ASHTON, RAYMOND. — Elected an Associate Member, 400.
- ASPLUNDH, EDWIN THEODORE. — Elected an Associate Member, 580.
- ATKINSON, ARTHUR GARRATT. — Elected an Associate Member, 246.
- ATWOOD, CHESTER ELY. — Transferred to Grade of Associate Member, 398.
- AUSTIN, HERBERT ASHFORD ROBERTSON. — Elected a Junior, 309.
- AVERY, CHARLES DWIGHT. — Transferred to Grade of Member, 72.
- AYERS, MURRAY CHASE. — Elected an Associate Member, 396.
- AYRES, LYONEL. — Elected a Member, 399.
- BACOT, WILLIAM SINCLAIR. — Death announced, 637.
- BAINBRIDGE, CHARLES NEWTON. — Elected an Associate Member, 634.
- BAKENHUS, R. E. — Paper by, 2.
- BAKER, FREDERICK ANDREW. — Elected an Associate Member, 400.
- BAKHMETEFF, BORIS ALEXANDROWITCH. — Elected a Member, 246.
- BALDRY, WILLIAM EARNEST. — Elected an Associate Member, 396.
- BALDWIN, WILLIAM HENRY. — Death announced, 249.
- Baltimore Association. — Revised Constitution Approved, 313; Abstract of Minutes of Meetings of, 348, 534; Report of Committee of, On Relations of Local Associations to the Society, etc., 584.
- BANISTER, WILBUR VICK. — Elected an Associate Member, 400.
- BANKS, CHARLES WILBUR. — Transferred to Grade of Associate Member, 248.
- BANKS, JOHN EDWIN. — Transferred to Grade of Member, 72.
- BANNON, ANTHONY FRANCIS, JR. — Elected a Member, 580.
- BANTA, RUSSELL VINCENT. — Transferred to Grade of Associate Member, 636.
- BARBER, JUSTIN FREDERIC. — Elected an Associate Member, 308.
- BARGLEBAUGH, CHARLES ERWIN. — Elected a Member, 634.

BARKER.

BARKER, CHARLES ROBERT.—Elected an Associate Member, 580.
 BARKER, RICHARD McLEAN.—Elected an Associate Member, 755.
 BARNES, RALPH DOUGLASS.—Elected a Junior, 309.
 BARROWS, GEORGE ELLSWORTH.—Transferred to Grade of Member, 636.
 BARSTOW, EUGENE DUSTIN.—Elected an Associate Member, 634.
 BARTLETT, CHARLES TERRELL.—Transferred to Grade of Member, 401.
 BARTLETT, WILLIAM ANDREWS.—Transferred to Grade of Associate Member, 72.
 RASCOM, GEORGE ROCKWELL.—Elected an Associate Member, 580.
 BASCOME, WESTERN RADFORD.—Transferred to Grade of Member, 582.
 BASSEL, GUY MANNERING.—Transferred to Grade of Member, 757.
 BATES, FRANCIS.—Elected an Associate Member, 755.
 BATES, ONWARD.—Appointed as Representative of Society on Board of "Washington Award", 312; Letter from, Relative to Proposed Revised Constitution, 647.
 BATTLE, JAMES BEALLE.—Elected a Member, 634.
 BAUGHMAN, CHARLES ALTON.—Elected an Associate Member, 580.
 BAYLISS, PAUL.—Elected an Associate Member, 580.
 BEARD, ROBERT STANLEY.—Elected an Associate Member, 580.
 BEARDSLEY, ARTHUR.—Death announced, 311.
 BEAVEN, EDUARDO.—Elected an Associate Member, 580.
 BECK, RALPH ERNEST.—Transferred to Grade of Associate Member, 310.
 BEERBOWER, DUMONT.—Transferred to Grade of Associate Member, 757.
 BEGLEN, RALPH NORMAN.—Transferred to Grade of Member, 248.
 BELL, F. F.—Discussion by, 395.
 BELLAMY, HERBERT ERNEST.—Transferred to Grade of Member, 636.
 BEMENT, R. B. C.—On Committee of Arrangements for Annual Convention, 252.

BENEDICT.

BENEDICT, FARRAND NORTHROP.—Transferred to Grade of Member, 398.
 BENNETT, FRED.—Elected an Associate Member, 634.
 BENNETT, JOHN WALTER FRANK.—Elected a Member, 308.
 BENNETT, MANCHE OWEN.—Elected an Associate Member, 246.
 BENNISON, ERNEST WILLIAM.—Elected an Associate Member, 246.
 BERDEAU, RAY W.—Paper by, 579.
 BERENTS, HANS.—Elected an Associate Member, 246.
 BERGEN, VAN BRUNT.—Death announced, 311.
 BERKEFELD, JOHN WOLFRAM.—Transferred to Grade of Associate Member, 583.
 BERRY, J. B.—Resigns as Member of Special Committee on Stresses in Railroad Track, 313.
 BESSELIEVRE, EDMUND BULKLEY.—Elected an Associate Member, 755.
 BESTOR, ODIN BALTIMORE.—Elected an Associate Member, 634.
 BICKEL, GEORGE ROBERT.—Elected a Junior, 635.
 BICKERTON, WILBUR EARLE.—Transferred to Grade of Associate Member, 398.
 BIEDINGER, JOHN ROBERT.—Elected an Associate Member, 400.
 BIGELOW, EDWARD MANNING.—Death announced, 2.
 BILDERBECK, GEORGE LESLIE.—Elected an Associate Member, 755.
 BILYEU, C. S.—Discussion by, 2.
 BINGER, WALTER DAVID.—Elected a Junior, 397.
 BIRD, HAROLD CRUSIUS.—Elected a Junior, 757.
 BISHOP, GUY HERSEY.—Transferred to Grade of Associate Member, 398.
 BITHER, TOM ALLEN.—Transferred to Grade of Associate Member, 636.
 BIXBY, WILLIAM H.—Appointed to Represent Society at Water Power Development Conference, 74.
 BLACK, CLARENCE NEELLY.—Transferred to Grade of Member, 309.

BLACK.

BLACK, ERNEST BATEMAN.—Transferred to Grade of Member, 309.
 BLACK, W. M.—Letter from, 760.
 BLACKWELL, F. O.—Discussion by, 307.
 BLAIR, CLARENCE MOORE.—Transferred to Grade of Member, 398.
 BLAIR, W. B.—Discussion by, 69, 70.
 BLANCHARD, A. H.—Discussion by, 69.
 BLANCHARD, ROLLO KIMBALL.—Elected an Associate Member, 247.
 BLECH, EDWARD SORREL.—Elected an Associate Member, 247.
 BLISS, TULLA ETHAN.—Elected an Associate Member, 580.
 BLOSSER, EMMET CHANDLER.—Elected an Associate Member, 580.
 BLUHM, HERMAN WILLIAM.—Elected an Associate Member, 580.
 BLY, EDWIN PRESCOTT.—Elected a Junior, 309.
 Board of Direction.—Report of, 13, 66, 78; Report to, Of Committee on Special Committees, 73, 124, 404; Appointment by, Of Representatives of Society on United Engineering Society Board, 74; Terms of Representatives of Society on United Engineering Society Board Fixed by, 74; Adoption by, of Annual Report, 74; Report to, Relative to Work on Addition to United Engineering Society Building, 74; Letter to, and Action of, Relative to Increased Cost of Addition to United Engineering Building, 74; Appointment by, of Representatives of Society at Water Power Development Conference, 74; Adoption by, of Report of Committee Appointed to Recommend the Award of Prizes, 74; Letters from Local Associations Relative to Relations of, To Society, etc., Considered by, 75; Authorization by, Of Appointment of Committee on Relations of Local Associations to Society, etc., 75; Appointment of Representatives of Society on Joint Conference Committee of Engineering Societies, 75; Authorization by, Of Explanatory Foot-Note Relative to Salaries of Officers, 75; Resolutions

BOARD OF DIRECTION.

of, Relative to Universal Military Training and Service, 308, 314, 331; Action by, On Report of Committee on Revision of the Constitution, 311, 315; Resolutions of, Relative to Correspondence in Regard to Revision of the Constitution, 311, 638; Adoption by, Of Report of Committee on Relations of Local Associations to the Society, etc., 312, 327; Report to, Relative to Removal of Library, 312; Resolution of, Relative to Transfer of Ownership of Library, 312; Approval by, Of Amendments to By-Laws of the U. E. S. Relative to Formation of Engineering Council, 312, 342; Resolutions of, Relative to Representation of U. E. S., etc., on Engineering Council, 312; Action by, Relative to Acceptance of Contingent Fees, 313, 332; Action by, Relative to Letter from, and Resolution by, San Diego Association on Proposed Bill for Licensing Architects in California, 313; Action by, Relative to Request for Co-Operation by Military Engineering Committee of New York, 313; Action by, Relative to Letter from Secretary of Department of Commerce Relative to Economy in Food Resources of Country, 313, 333; Resolution by, Relative to Recommendations to Office or Position by Officers of Society, 313; Resolution by, Relative to Powers of the Executive Committee, 314; Resolution by, Relative to Report of Committee on Employment Bureau, 314; Appointment of Committee of, To Expunge Correspondence in Regard to Report of Committee on Revision of the Constitution, 638; Adoption by, Of Report of Committee on Special Committees Relative to Appointment of New Special Committees, 639; Approval by, Of Minutes of Meeting of Executive Committee of, 639; Approval by, Of Report of Secretary Rela-

BOARD OF DIRECTION.

tive to Cost of Paneling Rooms in New Society Headquarters, 639; Action by, Relative to Publication of Correspondence in Regard to Revision of the Constitution, 640; Adoption by, Of Report of Committee on Disposal of Duplicates in Library, 640; Authorization by, Of Appointment of Representatives of Society on Engineering Council, 640; Resolution by, Relative to Discharge of General Conference Committee of the National Engineering Societies, 640; Resolution by, Relative to Appointment of Secretary by Representatives of Society on Engineering Council, 640; Report to, Relative to Replies Received Regarding Resolution of, on Universal Military Training, 640; Report to, Relative to Appointment of Representatives of Society on Engineering Societies Section of Committee on Science and Research of Advisory Commission, Council of National Defense, 640; Authorization by, Of Appointment of Special Committee to Recommend the Award of Prizes, 640; Appointment by, Of Committee to Prepare Minute on the Death of James Forrest, 640; Resolution of, Relative to 1917 Annual Address of President, 641; Resolution by, Relative to Enlargement of Joint Committee on the Adoption of the Metric System, 641; Resignation of F. G. Jonah as a Member of, Accepted, 642; Appointment of John W. Alvord as a Member of, 642; Appropriation by, Toward Erection of Memorial to the Late John Ericsson, 642; Adoption by, Of Report of Publication Committee on Use of Metric Equivalents in Society Publications, 642; Resolution by, Relative to Co-operation with Council of National Defense in Consideration of Engineering Education, 642; Resolution by, Relative to Establishment of Closer Relations with Canadian Society of

BOARDMAN.

Civil Engineers, 642; Adoption by, Of Minute on Death of James Forrest, 643; Action by, Of Report of Secretary on Society's New Headquarters, 644, 667; Action by, Relative to Invitation from American Society of Mechanical Engineers to Appoint Representatives to Assist in Framing Code for Testing of Water Wheels, 644; Report to, Of Appointment of Representatives on the Engineering Council, 644; Action by, Relative to Statement in Regard to Civil Engineers for War Service, 644, 665; Report to, Of Appointment of Committee to Recommend the Award of Prizes, 645; Statement to, Relative to Cablegram from Central Board, Engineers Ways of Communication of Russia, 645; Authorization by, Of Committee to Canvass Preliminary Suggestions for Members of Nominating Committee, etc., 645; Date of Meeting Fixed, 645; Appointment by, Of Representative of Society on John Fritz Medal Board of Award, 645; Action by, Relative to Progress Report of Alfred Noble Memorial Committee, 645; Action by, Relative to Establishment of Roll of Honor of Members in U. S. Military Service, 645; Report to, Of Committee Appointed to Expunge Correspondence in Regard to Report of Committee on Revision of the Constitution, 646; Action by, Relative to Publication of Letters in Regard to Proposed Revised Constitution, 647; Resolutions Adopted by Executive Committee of, Relative to War Revenue Act, 672; Resolutions Adopted by Executive Committee of, Relative to Drafting or Enlistment of Engineering Students for War Service, 759.

BOARDMAN, CHARLES S.—Discussion by, 199.

BOGART, JOHN.—Address by, 754.

BOGERT, JOHN RALPH.—Elected an Associate Member, 396.

BOHLKEN.

- BOHLKEN, JAMES DEWITT.—Elected a Junior, 397.
- BOLTON, FRANK LEONARD.—Transferred to Grade of Associate Member, 398.
- BONNER, JOHN POLLOCK.—Elected an Associate Member, 71.
- BONTECOU, DANIEL.—On Committee to Report on Proper Relations of Local Associations to Society, etc., 75.
- BOORMAN, KITCHELL MONCKTON.—Elected an Associate Member, 634.
- BORNEFELD, CHARLES FOWLER.—Transferred to Grade of Associate Member, 72.
- BOTHUM, GEORGE GILBERT.—Elected a Junior, 71.
- BOUCHER, W. J.—Discussion by, 1, 395; Address by, 754.
- BOWE, THOMAS FRANCIS.—Elected an Associate Member, 755.
- BOWEN, ROBERT LAWTON.—Elected an Associate Member, 400.
- BOWIE, ALFRED WILLIAM.—Elected a Member, 399.
- BOWIE, WILLIAM.—Elected a Member, 246.
- BOWMAN, DANIEL WHEELER.—Death announced, 249.
- BOWNE, SIDNEY BREESE.—Transferred to Grade of Associate Member, 636.
- BOYD, ROBERT PLATT.—Elected an Associate Member, 400.
- BOYD, ROBERT W.—Appointed Teller to Canvass Ballot for Officers, 65, 78.
- BOYNTON, HERBERT LESLIE.—Elected an Associate Member, 755.
- BRAGONIER, ARTHUR TAYLOR.—Elected a Junior, 397.
- BRANCH, LESTER VAN NOY.—Transferred to Grade of Member, 582.
- BRAUNE, GUSTAVE MAURICE.—Transferred to Grade of Member, 398.
- BRAUNWORTH, PERCY LEWIS.—Transferred to Grade of Member, 401.
- BREED, CHARLES WARREN.—Elected an Associate Member, 580.
- BREED, H. S.—Discussion by, 69.
- BREITHAUP, W. H.—Discussion by, 754.
- BRENNAN, JOSEPH LAWRENCE.—Transferred to Grade of Associate Member, 248.

BRES.

- BRES, EDWARD SEDLEY.—Elected an Associate Member, 755.
- BREYMAN, JOHN BERNARD, JR.—Elected a Junior, 397.
- BRICKLIN, SIMON.—Elected a Junior, 397.
- BRIGGS, ROBERT WESLEY.—Elected an Associate Member, 400.
- BRIGGS, W. C.—Discussion by, 2.
- BRIGHT, JOSEPH SHIRLEY.—Transferred to Grade of Member, 72.
- BROADHURST, W. H.—Discussion by, 70.
- BROKER, ALBERT EDWARD.—Transferred to Grade of Associate Member, 758.
- BROWN, CHARLES FRANKLIN.—Transferred to Grade of Member, 401.
- BROWN, HORACE TROWBRIDGE.—Elected an Associate Member, 634.
- BROWN, HORATIO WHITTEMORE.—Elected a Junior, 309.
- BROWN, JOHN GRIFFITHS.—Death announced, 758.
- BROWN, JOHN HENRY, JR.—Elected an Associate Member, 400.
- BROWN, MARSHALL W.—Discussion by, 2.
- BROWN, WILLIAM EDWARD.—Elected an Associate Member, 755.
- BRYAN, GEORGE, JR.—Transferred to Grade of Associate Member, 758.
- BUCHER, HAROLD FOLLMER.—Elected a Junior, 635.
- BUCK, FRED.—Elected a Member, 70.
- BUCK, H. R.—Resolution by, 68, 103.
- BUCK, R. S.—On Nominating Committee, 66, 80.
- BUEHLER, WALTER.—Discussion by, 69, 70.
- BUFORD, CHARLES HOMER.—Elected an Associate Member, 400.
- BULKELEY, OSCAR ERNEST.—Elected an Associate Member, 634.
- BURGER, ALFRED ANDREW.—Elected a Junior, 400.
- BURKS, PETER DEMARCUS, JR.—Elected a Junior, 582.
- BURKY, CHARLES ROGY.—Elected a Member, 396.
- BURNETTE, GEORGE HARLEY.—Elected an Associate Member, 247.
- BURPEE, GEORGE WILLIAM.—Transferred to Grade of Member, 248.
- BURR, WILLIAM H.—Appointed to Represent Society at Joint Con-

BURRAGE.

- ference on American Engineering Standards, 74.
- BURRAGE, JOHN OTIS.—Transferred to Grade of Member, 72.
- BURT, H. J. — On Committee to Recommend the Award of Prizes, 645.
- BUSH, LEE MARSHALL.—Elected an Associate Member, 755.
- BUSH, LINCOLN.—Resigns as Member of Committee on Special Committees, 129.
- BUTLER, ARTHUR GRAY.—Transferred to Grade of Associate Member, 636.
- BUTLER, FRANCIS MARION.—Elected a Member, 634.
- BUTLER, WILLIAM PARKER.—Elected an Associate Member, 755.
- BUXTON, EDWIN WALKER.—Elected an Associate Member, 247.
- CAFFALL, GEOFFREY ARTHUR.—Transferred to Grade of Associate Member, 583.
- CAHILL, JOHN RICHARD.—Transferred to Grade of Member, 401.
- California, Licensing of Architects in.—Letter from, and Resolution by, San Diego Association Relative to Proposed Bill for, 313, 341; Text of Proposed Bill for, 334.
- CAMPBELL, PAUL CALDWELL.—Transferred to Grade of Associate Member, 310.
- CAMPBELL, THOMAS FRANCIS. — Elected an Associate Member, 755.
- Canadian Society of Civil Engineers. —Resolution of Board of Direction Relative to Establishment of Closer Relations with, 642.
- CANFIELD, GEORGE HATHAWAY. — Elected an Associate Member, 396.
- CANNON, SYLVESTER QUAYLE. — Elected a Member, 70.
- CAPELEN, F. W.—On Committee of Arrangements for Annual Convention, 252.
- CARLSON, PAUL NELS.—Elected an Associate Member, 634.
- CARNELLI, CHARLES MICHAEL. — Elected a Junior, 401.

CARPENTER.

- CARPENTER, HARRY KERBAUGH. — Elected an Associate Member, 71.
- CARRINGTON, HENRY.—Elected an Associate Member, 247.
- CARSON, HARRY Y.—Discussion by, 307.
- CARSON, MERWIN BISHOP.—Elected an Associate Member, 634.
- CARSON, WILLIAM FRANKLIN. — Elected an Associate Member, 247.
- CARSTARPHEN, FREDERICK CHARLES. —Paper by, 310; Discussion by, 310; Transferred to Grade of Member, 398.
- CARTER, HUGH RUBEN.—Elected an Associate Member, 247.
- CASEY, ISAAC JACQUES, JR.—Elected an Associate Member, 400.
- CATON, JOHN HIRST, 3D.—Elected an Associate Member, 400.
- "Cement Joints for Cast-Iron Water Mains," presented and discussed, 307.
- CHAMBERLAIN, JOSEPH JENKS, JR.—Transferred to Grade of Associate Member, 248.
- CHAMBERLIN, CHARLES GROVER. — Elected an Associate Member, 634.
- CHAMBERLIN, EARL WILLIAM. — Elected an Associate Member, 396.
- CHAMBERS, CLOYDE CLEAVER.—Elected an Associate Member, 247.
- CHAPIN, CHARLES WALTER.—Elected an Associate Member, 400.
- CHAPPELL, FRANK WILSON.—Elected an Associate Member, 755.
- CHASE, GUY HERBERT.—Elected a Member, 246.
- CHERRINGTON, F. W.—Discussion by, 70.
- CHERRY, ALAN GORDON.—Elected a Junior, 582.
- CHESLEY, JUSTUS GILBERT.—Elected a Junior, 582.
- CHIPLEY, DUDLEY.—Elected an Associate Member, 580.
- CHITTENDEN, HIRAM MARTIN.—Paper by, 633; Death announced, 637.
- CHRISTIE, FRANCIS DORSEY. — Elected an Associate Member, 400.
- CHRISTIE, CHESTER DE BAUN.—Elected a Member, 580.

CHURCH.

- CHURCH, S. R.—Discussion by, 70.
 CHURCHILL, PERCIVAL M.—Resolution by, 68, 105.
 CHURCHILL, ROBERT CARR.—Elected an Associate Member, 755.
 "Cinder Concrete Floor Construction Between Steel Beams," Awarded the Collingwood Prize, 66, 79.
 Civil Engineers for War Service.—Statement Relative to, 644, 665.
 Civil Engineers, Special Committee to Investigate the Conditions of Employment of, and Compensation of.—Final Report of, 67, 91; Discharge of, 67, 97; Discussion of Final Report of, 92; Report of Committee on Special Committees on Work of, and Appropriation for, 126.
 CLANCY, ROBERT DUFFUS.—Elected a Junior, 582.
 CLAPP, OTIS F.—On Finance Committee, 76; Death announced, 310, 311.
 CLARK, JAMES HOPKINS.—Elected an Associate Member, 755.
 CLARK, ROY ROSS.—Elected an Associate Member, 308.
 CLAUSSEN, OSCAR.—On Committee of Arrangements for Annual Convention, 252.
 CLAYSON, GEORGE PHELPS.—Elected an Associate Member, 400.
 CLEVELAND, MALCOLM COLBURN.—Elected a Member, 399.
 Cleveland Association.—Abstract of Minutes of Meetings of, 144, 203, 535; Discussion by Members of, On Relations of Local Associations to the Society, etc., 585; Presentation to, Of Duplicates in Society Library, 640.
 CLIFFORD, WALTER WOODBRIDGE.—Transferred to Grade of Associate Member, 72.
 CLINE, MCGARVEY.—Elected a Member, 70.
 CLINTON, DELMAR SMITH.—Elected an Associate Member, 71.
 CLOGHER, ALEXANDER CLARKE.—Elected a Member, 754.
 COALE, H. D.—Discussion by, 395.
 COBURN, H. L.—Discussion by, 246.
 Code for Testing of Water Wheels.—Letter from American Society of Mechanical Engineers Relative to

COHEN.

- Appointment of Representatives to Assist in Framing of, 644.
 COHEN, JACOB XENAB.—Transferred to Grade of Associate Member, 310.
 COLBY, ELMER ELLSWORTH.—Death announced, 637.
 COLE, CLINTON LLEWELLYN.—Transferred to Grade of Member, 757.
 COLEMAN, EUGENE HUNTER.—Transferred to Grade of Associate Member, 248.
 COLEMAN, JOHN F.—On Publication Committee, 76; Nominated as Vice-President, 603; Discussion by, 637.
 COLGAN, ROBERT JOSEPH.—Transferred to Grade of Associate Member, 72.
 COLHOUN, DANIEL WARWICK.—Elected a Junior, 401.
 Collingwood Prize.—Award of, 66, 79.
 COLLINS, CHARLES DICKEY.—Elected a Member, 70.
 COLLINS, EARL HARRY.—Elected a Junior, 71.
 Colorado Association.—Abstract of Minutes of Meeting of, 7, 143, 202, 256, 347, 422, 606; Statement Relative to Technical and Non-Technical Committees of, 136; Discussion by Members of, On Relations of Local Associations to the Society, etc., 590.
 Committee of Arrangements for Annual Convention.—Appointment of, 252.
 Committee of Arrangements for Annual Meeting.—Appointment of, 761.
 Committee of Board of Direction on Relations of Local Associations to the Society, etc.—Appointment of Authorized, 75; Appointment of, 75; Report of, 312, 327; Discussion on Report of, 584.
 Committee of Board of Direction to Expunge Correspondence in regard to Report of Committee on Revision of Constitution.—Appointment of, 638; Report of, 646.
 Committee of Board of Direction to Prepare Minute on the Death of

COMMITTEE.

James Forrest.—Appointment of, 640; Report of, 643.

Committee on A National Water Law.—Progress Report of, 86; Report of Committee on Special Committees on Work of, and Appropriation for, 127; Change of Name of, Suggested and Adopted, 73, 127.

Committee on Alfred Noble Memorial.—Statement of Work of, 70, 137; Progress Report of, 312, 645, 648; Appointment of Member of, 313.

Committee on Concrete and Reinforced Concrete.—Final Report of, 67, 86; Discharge of, 67, 89; Discussion Relative to Appointment of New, 90; Report of Committee on Special Committees on Work of, and Appropriation for, 124; Report of Committee on Special Committees Relative to Appointment of New, 404, 638.

Committee on Employment Bureau.—Resolution Relative to Appointment of, 68, 105; Report of, 314, 330; Members of, 314; Discharge of, 314; Resolution of Board of Direction Relative to Report of, 314.

Committee on Engineering Education.—Progress Report of, 66, 80; Report of Committee on Special Committees on Work of, 125.

Committee on Finance.—Appointment of, 76.

Committee on Floods and Flood Prevention.—Discharge of, 67, 102; Report of Committee on Special Committees Relative to Discharge of, 127.

Committee on Library.—Appointment of, 76; New Chairman Appointed, 312; Report of, 642, 671.

Committee on Materials for Road Construction.—Progress Report of, 67, 84; Minutes of Special Meetings for Discussion of Report of, 69; Discussion of Report of, 69, 70; Report of Committee on Special Committees on Work of, and Appropriation for, 125; Minutes of Meetings of, 207, 431, 609, 688, 689.

COMMITTEE.

Committee on Nominations.—Report of Tellers Appointed to Canvass Suggestions for, 66, 79; Presents List of Nominees, 603; Report of, 642; Appointment of Committee of Board of Direction to Canvass Preliminary Suggestions for Members of, Authorized, 645; Dates Fixed for Mailing Forms for, and Canvassing of, Final Suggestions for Members of, 645.

Committee on Personnel of Engineering Council.—Statement of Work of, Relative to Civil Engineer Specialists for War Service, 644, 665.

Committee on Publications.—Appointment of, 76; Report of, On Use of Metric Equivalents in Society Publications, 642.

Committee on Regulation of Water Rights. *See* Committee on A National Water Law.

Committee on Revision of the Constitution.—Report of, 311, 315; Discharge of, 311; Resolutions of Board of Direction Relative to Correspondence in Regard to Report of, 311, 638; Appointment of Committee of Board of Direction to Expunge Correspondence in Regard to Report of, 638; Letter Relative to Publication of Correspondence in Regard to Report of, 640; Report of Committee of Board of Direction Appointed to Expunge Correspondence in Regard to Report of, 646.

Committee on Special Committees.—Report of, 73, 124, 404, 638; Appointment of, 76; Letter from Clemens Herschel to, 129.

Committee on Steel Columns and Struts.—Progress Report of, 67, 86; Report of Committee on Special Committees on Work of, and Appropriation for, 125; Minutes of Meetings of, 150, 432, 689; Resignation of Member of, Accepted, 313; Appropriation for Work of, 639.

Committee on Stresses in Railroad Track.—Progress Report of, 67, 100; Report of Committee on

COMMITTEE.

Special Committees on Work of, 127; Minutes of Meetings of, 260, 689; Resignation of Member of, Accepted, 313.

Committee on Valuation of Public Utilities.—Final Report of, 67, 97; Discussion Relative to Discharge of, 67, 98; Report of Committee on Special Committees on Work of, and Appropriation for, 126.

Committee to Codify Present Practice on the Bearing Value of Soils for Foundations.—Progress Report of, 67, 99; Report of Committee on Special Committees on Work of, and Appropriation for, 126; Minutes of Meetings of, 429.

Committee to Communicate with State Department Relative to Indemnity for Death of Stanley Alfred Miller.—Appointment Authorized, 530.

Committee to Investigate and Report on the Opportunities for American Engineers in Russia and South America. — Appointment of, Referred to Board of Direction, 68, 103; Report of Committee on Special Committees Relative to Appointment of, 405, 639.

Committee to Investigate the Conditions of Employment of, and Compensation of, Civil Engineers.—Final Report of, 67, 91; Discharge of, 67, 97; Discussion of Final Report of, 92; Report of Committee on Special Committees on Work of, and Appropriation for, 126.

Committee to Recommend the Award of Prizes.—Report of, 66, 74, 79; Appointment of, Authorized, 640; Appointment of, 645.

Committees of the Society. *See also* Joint Committees.

Committees, Special. — Report of Committee on, 73, 124, 404, 638; Appointment of Committee on, 76; Letter from Clemens Herschel to Committee on, 129; Minutes of Meetings of, 150, 207, 260, 429, 609, 688, 689.

CONANT, ELBRIDGE ROBBINS.—Elected a Member, 246.

CONCRETE.

Concrete and Reinforced Concrete, Special Committee on.—Final Report of, 67, 86; Discharge of, 67, 89; Discussion Relative to Appointment of New, 90; Report of Committee on Special Committees on Work of, and Appropriation for, 124; Report of Committee on Special Committees Relative to Appointment of New, 404, 638.

Conference on Engineering Co-Operation.—Report of Delegates to, 313.

CONGDON, HOWARD WILBUR.—Elected an Associate Member, 308.

CONNELL, WILLIAM HENRY.—Discussion by, 69, 70; Transferred to Grade of Member, 582.

Constitution.—Report of Committee on Revision of the, 311, 315; Resolutions of Board of Direction Relative to Correspondence in Regard to Revision of, 311, 638; Statements Relative to Proposed Revision of, 407, 638; Appointment of Committee of Board of Direction to Expunge Correspondence in Regard to Report of Committee on Revision of, 638; Letter Relative to Publication of Correspondence in Regard to Report of Committee on Revision of, 640; Report of Committee of Board of Direction Appointed to Expunge Correspondence in Regard to Report of Committee on Revision of, 646; Letters in Regard to Proposed Revised, 647; Action by Board of Direction Relative to Publication of Letters in Regard to Proposed Revised, 647; Resolution Relative to Proposed Revised, 647.

"Construction Methods for Rogers Pass Tunnel," presented and discussed, 70.

Contingent Fees. — Correspondence Relative to Acceptance of, 313, 332, 405.

CONVERSE, JOSEPH BRANDLY. — Elected an Associate Member, 396.

CONWAY, JOHN S.—On Nominating Committee, 66, 80.

COOKSEY.

- COOKSEY, ROBERT MAVIN.—Transferred to Grade of Member, 636.
 COOLEY, LYMAN EDGAR.—Death announced, 197.
 COOPER, CLARENCE WINSTON.—Transferred to Grade of Associate Member, 248.
 COOPER, HUGH L.—On Committee on Alfred Noble Memorial, 313.
 COPE, ERLE LONG.—Transferred to Grade of Member, 757.
 CORKRAN, WILBUR SHERMAN.—Elected an Associate Member, 247.
 CORTRIGHT, EDWIN KEEN.—Transferred to Grade of Member, 401.
 COTTINGHAM, GEORGE, JR.—Elected an Associate Member, 755.
 COTTON, WILLIAM OWEN.—Transferred to Grade of Associate Member, 310.
 COURTENAY, WILLIAM HENRY.—Elected an Associate Member, 400.
 COX, JOEL BEAN.—Elected a Junior, 248.
 CRAGIN, CHARLES CALHOUN.—Elected a Member, 580.
 CRANDALL, CHARLES LEE.—Death announced, 530.
 CRANE, ALBERT ELI.—Elected an Associate Member, 247.
 CRAVEN, ALFRED.—On Finance Committee, 76.
 CRAWFORD, HUGH WILLIAM.—Elected an Associate Member, 634.
 CREAGER, WILLIAM P.—Discussion by, 246; Presents Paper, 307; Resolution of Thanks Extended to, For Presentation of Paper, 308.
 CRESSON, B. F., JR.—Appointed Teller to Canvass Ballot for Officers, 65, 78.
 CRESSON, JAMES.—Elected an Associate Member, 400.
 CROCKER, H. S.—On Committee on Employment Bureau, 314.
 Croes Medal.—Award of, 66, 79.
 CROLL, HERBERT GREISS.—Transferred to Grade of Associate Member, 583.
 CROMWELL, GEORGE.—Transferred to Grade of Member, 401.
 CROSBY, LOTHROP.—Elected an Associate Member, 580.

CROWLEY.

- CROWLEY, JOHN ADAM.—Elected an Associate Member, 755.
 CUDEBEC, ALBERT BENNETT.—Elected a Member, 396.
 CUDWORTH, F. E.—Discussion by, 199.
 CULPEPER, HORACE.—Elected an Associate Member, 634.
 CUMMINGS, NOAH.—Appointed Teller to Canvass Ballot for Officers, 65, 78.
 CUMMINGS, ROBERT A.—Presents Progress Report of Special Committee to Codify Present Practice on the Bearing Value of Soils for Foundations, 67, 99.
 CUMMINGS, ROBERT AUGUSTUS, JR.—Elected a Junior, 582.
 CUNLIFF, NELSON.—Elected an Associate Member, 580.
 CUNNINGHAM, ANDREW CHASE.—Death announced, 73.
 CUNNINGHAM, JOHN GEORGE LAWRENCE.—Transferred to Grade of Member, 309.
 CURD, WILLIAM CANTRILL.—Elected a Member, 309.
 Current Engineering Literature, 34, 162, 221, 279, 368, 487, 555, 631, 737, 818.
 CURTISS, CHARLES DWIGHT.—Elected a Junior, 582.
 CUTLER, DANIEL BOYDEN.—Elected an Associate Member, 396.
 CYKLER, EMIL FRANK.—Transferred to Grade of Associate Member, 248.
 DAILY, CORNELIUS MARK.—Elected a Member, 580.
 DAKIN, ROBERT EDWARD.—Transferred to Grade of Associate Member, 72.
 DANFORTH, GEORGE CLAPP.—Elected an Associate Member, 755.
 DANFORTH, RICHARD STEVENS.—Elected an Associate Member, 71.
 DARLING, W. L.—Elected a Director, 69, 111; On Committee on Special Committees, 76; On Committee of Arrangements for Annual Convention, 252.
 DAVIES, JOHN PERCIVAL.—Transferred to Grade of Member, 398.
 DAVIES, JOHN VIPOND.—Discussion by, 70; On Library Committee, 76; On Committee on Special

DAVIS.

- Committees, 76; On Engineering Societies Section of Committee on Science and Research of Advisory Commission Council of National Defense, 640; On Committee to Prepare Minute on Death of James Forrest, 640.
- DAVIS, ARTHUR P.—Elected a Director, 69, 111.
- DAVIS, HAROLD.—Death announced, 311.
- DAVIS, JOSEPH PHINEAS.—Death announced, 310.
- DAVIS, WILBUR WARD.—Elected a Member, 754.
- DAY, W. E.—Discussion by, 2.
- DE LA BARRE, WILLIAM.—On Committee of Arrangements for Annual Convention, 252.
- DELSON, I.—Discussion by, 753.
- DE MAHY, STEPHEN GREVILLE. — Elected a Junior, 757.
- DE MEY, EDWARD JEAN BERNARD.—Transferred to Grade of Associate Member, 398.
- DENHAM, DONALD POWER.—Elected a Junior, 309.
- DENNIS, A. C.—Paper by, 70.
- DESMOND, THOMAS C.—Resolution by, 198.
- "Detention Reservoirs with Spillway Outlets as an Agency in Flood Control," presented and discussed, 633.
- DEWELL, HENRY DIEVENDORF.—Transferred to Grade of Member, 401.
- DEWITT, BRINTON BROWN.—Elected an Associate Member, 580.
- DEYO, S. L. F.—On General Conference Committee of the National Engineering Societies, 640.
- DIAZ QUINONES, MARINO.—Elected an Associate Member, 755.
- DICKERSON, WALTER EDWARD. — Elected an Associate Member, 755.
- DICKINSON, WILLIAM DEWOODY. — Transferred to Grade of Member, 401.
- District of Columbia Association.—Abstract of Minutes of Meetings of, 203; Letter from Secretary of, Relative to Publication of Correspondence in Regard to Report of Committee on Revision of the Constitution, 640.

DIXON.

- DIXON, GEORGE GALE.—Transferred to Grade of Member, 72.
- DODDS, DAVID METHENY. — Transferred to Grade of Associate Member, 248.
- DODGE, BERT E.—Elected an Associate Member, 634.
- DODGE, WALDO EDGAR.—Elected an Associate Member, 247.
- DOELEMEN, HERMAN FRANÇOIS. — Transferred to Grade of Member, 582.
- DONNELLY, ALBERT LEE.—Elected an Associate Member, 71.
- DOUGHERTY, R. E.—Discussion by, 70.
- DOUGLAS, WALTER J.—Discussion by, 307; Presents Paper, 583.
- DOUTHETT, CLAUDE LACY.—Elected an Associate Member, 634.
- DOWNES, W. S.—Discussion by, 246.
- Draftsmen, Mechanical.—Request of U. S. Ordnance Department for, 632.
- DRAPER, LOTT DAVIS.—Elected an Associate Member, 396.
- DRESSER, GEORGE LUCAS.—Elected an Associate Member, 634.
- DRINKWATER, ERNEST.—Elected an Associate Member, 580.
- DRUMMOND, WILLIAM WORRELL.—Elected a Member, 580.
- DRURY, EDMUND HAZEN.—Death announced, 310.
- DRURY, WILLIAM FISHER.—Transferred to Grade of Associate Member, 758.
- Dues, Remittance of.—Resolution of Executive Committee of Board of Direction Relative to, Of Members during Military Service, 639, 673.
- Duluth Association. — Constitution Approved, 313; Abstract of Minutes of Meetings of, 684, 764.
- DU MOULIN, WALTER LOUIS.—Transferred to Grade of Member, 636.
- DUNCAN, MALCOLM. — Elected a Junior, 757.
- DUNLAP, ARTHUR HOYT.—Elected an Associate Member, 396.
- DUNLAP, JOHN HOFFMAN.—Elected an Associate Member, 308.
- DUNN, BEVERLY CHARLES.—Elected an Associate Member, 71.

DUPUY.

- DUPUY, VICTOR NEWTON.—Elected an Associate Member, 71.
- DURHAM, H. W.—Discussion by, 70.
- DURHAM, ROBERT PAUL.—Elected a Member, 754.
- DURYEA, EDWIN.—Presides at Meeting, 307; Discussion by, 307.
- DUSTHEIMER, CLARENCE CONDON.—Elected a Junior, 397.
- EASTERLY, WALTER STRATTON.—Elected a Junior, 309.
- EBERLY, VIRGIL ALLEN.—Transferred to Grade of Associate Member, 72.
- EDDY, HAROLD MANSFIELD.—Elected an Associate Member, 634.
- EDGREN, ARTHUR H.—Elected an Associate Member, 71.
- EDMONDSTONE, GEORGE STOVALL.—Elected a Member, 755.
- EDWARDS, GUY BANKER.—Elected an Associate Member, 247.
- EDWARDS, LATTA VANDERION.—Elected an Associate Member, 580.
- EDWARDS, RAMÓN SALAS.—Elected an Associate Member, 308.
- ELAM, WILLIAM EARLE.—Transferred to Grade of Member, 401.
- ELGEN, RILY ELLSWORTH.—Elected an Associate Member, 634.
- ELLIS, JOHN RUSSELL.—Elected an Associate Member, 755.
- ELLIS, LESTER FISHER.—Elected an Associate Member, 396.
- Employment Bureau, Committee on.—Resolution Relative to Appointment of, 68, 105; Report of, 314, 330; Members of, 314; Discharge of, 314; Resolution of Board of Direction Relative to Report of, 314.
- ENDICOTT, MORDECAI T.—Presents Report of Committee on Revision of the Constitution, 311.
- Engineering Co-Operation, Conference on.—Report of Delegates to, 313.
- Engineering Council.—Amendments to By-Laws of U. E. S. Relative to Formation of, 312, 342; Resolutions of Board of Direction Relative to Representation of U. E. S., etc., on, 312; Appointment of Representatives of Society on, Authorized, 640; Reso-

ENGINEERING.

- lution of Board of Direction Relative to Appointment of Secretary by Representatives of Society on, 640; Appointment of Representatives of Society on, 644; Statement of Work of Committee on Personnel of, Relative to Civil Engineer Specialists for War Service, 644, 665.
- Engineering Education.—Resolution of Board of Direction Relative to Co-operation with Council of National Defense in Consideration of, 642.
- Engineering Education, Special Committee on.—Progress Report of, 66, 80; Report of Committee on Special Committees on Work of, 125.
- Engineering Foundation Board.—Report of Secretary of, 673.
- Engineering Societies Club of Hawaii.—Letter from, 678.
- Engineering Societies, General Conference Committee of the National.—Appointment of Representatives of Society on, 75; Resolution of Board of Direction Relative to Discharge of Representatives of Society on, 640.
- Engineering Societies Section of Committee on Science and Research of Advisory Commission, Council of National Defense.—Appointment of Representatives of Society on, 640.
- Engineering Standards, American.—Appointment of Representatives of Society at Joint Conference on, 74; Report of Joint Committee on Organization of Committee on, 414.
- Engineering Students.—Resolutions of Executive Committee Relative to Drafting or Enlistment of, for War Service, 759.
- Engineers, American, in Russia and South America, Committee to Investigate and Report on Opportunities for.—Appointment of, Referred to Board of Direction, 68, 103; Report of Committee on Special Committees Relative to Appointment of, 405, 639.
- Engineers, Civil, for War Service.—Statement Relative to, 644, 665.

ENGINEERS.

- Engineers, Civil, Special Committee to Investigate Conditions of Employment of, and Compensation of.—Final Report of, 67, 91; Discharge of, 67, 97; Discussion of Final Report of, 92; Report of Committee on Special Committees on Work of, and Appropriation for, 126.
- Engineers, Licensing of.—Text of Bill for the, Adopted by the State Legislature of Florida, 408.
- ENGLISH, HAROLD LEWIS.—Transferred to Grade of Associate Member, 398.
- ERICSON, LAMBERT. THEODORE.—Elected an Associate Member, 396.
- ERICSSON, JOHN.—Appropriation by Board of Direction toward Erection of Memorial to, 642.
- ESTES, FRANKLIN EDWARD.—Transferred to Grade of Member, 401.
- EURICH, RICHARD HENDERSON.—Transferred to Grade of Associate Member, 402.
- EVANS, RICHARD.—Death announced, 73.
- EVEREST, CHARLES MARVIN.—Death announced, 530.
- EVERETT, CHESTER MCKENZIE.—Elected an Associate Member, 396.
- EVERS, RUDOLPH.—Elected an Associate Member, 396.
- Executive Committee of Board of Direction.—Resolution Relative to Powers of, 314; Minutes of Meeting of, 639; Report of, On Abandonment of Minneapolis Convention, 639; Resolution of, Relative to Remittance of Dues of Members during Military Service, 639, 673; Appropriation by, For Work of Special Committee on Steel Columns and Struts, 639; Report of, On Sale or Lease of Society House, 639; Resolutions of, Relative to War Revenue Act, 672; Resolutions of, Relative to Drafting or Enlistment of Engineering Students for War Service, 759.
- FAIRLIE, JOHN WALTER.—Elected an Associate Member, 580.

FAIRMAN.

- FAIRMAN, JAMES ROBERT.—Elected an Associate Member, 634.
- FAISON, HAYWOOD RENICK.—Elected an Associate Member, 71.
- FARNER, GEORGE KEITHLEY.—Elected an Associate Member, 634.
- FARNSWORTH, HOWARD RICHARDS.—Elected an Associate Member, 308.
- FASSETT, EARLE WALKER.—Elected an Associate Member, 247.
- FAY, FREDERIC H.—Elected a Director, 312.
- Fees. See Contingent Fees.
- FEILD, JULIAN CLARENCE.—Transferred to Grade of Member, 757.
- FELLOWS, PERRY AUGUSTUS.—Elected an Associate Member, 400.
- FERGUSON, HARRY FOSTER.—Transferred to Grade of Associate Member, 636.
- FEWSMITH, WILLIAM LEE.—Elected an Associate Member, 755.
- FICKES, EUGENE WELDON.—Elected a Junior, 582.
- Finance Committee.—Appointment of, 76.
- FINCH, J. K.—Discussion by, 246.
- FINDLEY, RAYMOND HANSON.—Elected an Associate Member, 755.
- FINLEY, GUY CEPHAS.—Elected an Associate Member, 580.
- FINLEY, WILLIAM H.—Appointed as Representative of Society on Board of "Washington Award", 312.
- FINNELL, WOOLSEY.—Elected a Member, 755.
- FIRMSTONE, FRANK.—Death announced, 530.
- FITZGERALD, DESMOND.—Presents Progress Report of Special Committee on Engineering Education, 66, 80.
- FLAGLER, CLEMENT ALEXANDER FINLEY.—Elected a Member, 246.
- FLEMING, BURTON PERCIVAL.—Transferred to Grade of Member, 72.
- FLEMING, JOSEPH HAMILTON.—Elected an Associate Member, 580.
- FLEMING, THOMAS, JR.—Transferred to Grade of Member, 757.
- FLINN, ALFRED D.—Elected a Director, 69, 111; On Library Committee, 76; Presides at Meeting,

FLOODS.

- 246, 310, 579, 583; Discussion by, 307; Appointed Chairman of Library Committee, 312; On Committee to Expunge Correspondence in Regard to Report of Committee on Revision of the Constitution, 638.
- Floods and Flood Prevention, Special Committee on.—Discharge of, 67, 102; Report of Committee on Special Committees Relative to Discharge of, 127.
- Florida, State Legislature of.—Text of Bill Adopted by, For the Licensing of Engineers, 408.
- FOARD, ARTHUR VIRGIN.—Elected an Associate Member, 634.
- FOGERTY, MERTON SHUMWAY. — Elected a Junior, 635.
- Food Resources of Country.—Letter from Secretary of Department of Commerce Relative to Economy in, 313, 333.
- FORREST, JAMES.—Death announced, 640; Appointment of Committee to Prepare Minute on the Death of, 640; Report of Committee to Prepare Minute on the Death of, 643.
- FORTER, CECIL ALFRED.—Elected an Associate Member, 580.
- FOWLER, CHARLES EVAN.—Discussion by, 529, 579, 753; Address by, 633, 754.
- FOX, ALVIN BARTHOLDI.—Elected an Associate Member, 396.
- "France at Work and at War, as Seen on a Recent Visit", Address on, 249.
- FRANK, AARON HERBERT.—Elected a Junior, 397.
- FRANK, LESLIE CARL.—Transferred to Grade of Associate Member, 583.
- FRANKLAND, F. H.—Discussion by, 529, 754.
- FRANKS, JOHN BRANDON.—Elected an Associate Member, 755.
- FRASER, ROBERT MARSHALL.—Elected an Associate Member, 308.
- FRAZEE, JOHN HATFIELD.—Death announced, 399.
- FRENCH, CARSON GEYER. — Transferred to Grade of Member, 309.
- FRIED, GEORGE DANIEL.—Elected a Junior, 71.

FRIEL.

- FRIEL, GRANT.—Elected an Associate Member, 755.
- FRITZ, JOHN, MEDAL. *See* John Fritz Medal.
- FRITZ, WALTER.—Elected a Junior, 635.
- FROST, GEORGE HENRY.—Death announced, 249.
- FUERTE, JAMES H.—Discussion by, 197.
- FULLER, CLARENCE MALCOLM. — Elected a Junior, 582.
- FULLER, GEORGE W.—Presides at Meeting, 2; Discussion by, 2, 197.
- FULLER, MYRON ELMER.—Elected an Associate Member, 580.
- FULWEILER, W. H.—Discussion by, 69, 70.
- FUNK, NORMAN WILL.—Elected an Associate Member, 580.
- GABELMAN, CHARLES GROVER.—Elected an Associate Member, 396.
- GAGE, R. B.—Discussion by, 69.
- GALBREATH, ALBERT WEBSTER.—Elected an Associate Member, 308.
- GALE, CLARENCE STEPHENS.—Elected an Associate Member, 400.
- GALE, LELAND ISAAC.—Elected an Associate Member, 71.
- GALLOWAY, JOHN D.—On Engineering Council, 644.
- GALT, CHARLES ELIJAH.—Elected an Associate Member, 755.
- GAMBIER-BOUSFIELD, GEORGE EDMUND.—Elected a Junior, 757.
- GANDOLFO, J. H.—Letter from, Relative to Establishment of an Evening Course in Military Instruction at College of the City of New York, 399.
- GANNETT, FARLEY.—Transferred to Grade of Member, 398.
- GARDINER, J. DEB. W.—Address by, 245.
- GARDNER, GEORGE WASHINGTON.—Elected a Junior, 71.
- GARDNER, HARRY CARTER. — Transferred to Grade of Member, 401.
- GARLOW, EZRA CLARK.—Elected a Member, 755.
- GARNETT, BENJAMIN JAY. — Transferred to Grade of Associate Member, 72.

GARRETT.

- GARRETT, FRANK BERRY.—Elected a Junior, 582.
- GARRETT, JAMES MADISON.—Elected a Member, 308.
- GATENS, RAY STUART.—Elected an Associate Member, 755.
- GAUMER, ALBERT WESLEY.—Transferred to Grade of Member, 401.
- GAUTIER, RAOUL CHARLES RODOLPHE.—Elected an Associate Member, 581.
- GAYNOR, KEYES CHRISTOPHER.—Transferred to Grade of Associate Member, 248.
- GELLERT, NATHAN HENRY.—Elected an Associate Member, 634.
- GEMBERLING, JOSEPH BURTON.—Elected a Member, 580.
- GENDELL, DAVID SMITH, JR.—Elected a Member, 399.
- General Conference Committee of the National Engineering Societies.—Appointment of Representatives of Society on, 75; Resolution of Board of Direction Relative to Discharge of Representatives of Society on, 640.
- GENTNER, OTTO HENRY, JR.—Transferred to Grade of Member, 398.
- GENUNG, JAMES HOLCOMBE.—Elected a Junior, 71.
- GEORGE, HOWARD HOWELL.—Transferred to Grade of Member, 401.
- GIBBS, WILLIAM WETMORE.—Transferred to Grade of Associate Member, 398.
- GIBONEY, DAVID FRANCIS.—Elected a Junior, 71.
- GIBSON, NORMAN ROTHWELL.—Elected a Member, 308; Discussion by, 637.
- GIBSON, OTIS.—Elected an Associate Member, 308.
- GIFFELS, WILLIAM CHARLES.—Transferred to Grade of Associate Member, 583.
- GILLESPIE, RICHARD H.—Appointed Teller to Canvass Ballot for Officers, 65, 78.
- GINSBURG, SAMUEL ROWLAND.—Transferred to Grade of Member, 398.
- GLADDING, JAMES NICKERSON.—Transferred to Grade of Member, 582.

GODDARD.

- GODDARD, LESLIE DREW.—Elected an Associate Member, 396.
- GODFREY, EDWARD.—Discussion by, 246.
- GOEDER, FRANK PEAT.—Elected an Associate Member, 308.
- GOETHALS, GEORGE W.—Nominated as Director, 603.
- GOLDEN, WILLIAM ANTHONY.—Elected an Associate Member, 247.
- GOLDSMITH, WILLIAM.—Discussion by, 69, 70; Transferred to Grade of Member, 757.
- GOMEZ, ERNESTO.—Elected a Junior, 248.
- GOODFELLOW, JAMES GORDON.—Transferred to Grade of Associate Member, 636.
- GOODRICH, E. P.—Letter from, Relative to Assistance Given by Society in Work of Taking State Military Census and Inventory, 645.
- GOODRICH, R. D.—Discussion by, 529.
- GOODWIN, WILLIAM ROBERT.—Elected an Associate Member, 396.
- GORDON, JOHN GARDNER, JR.—Elected an Associate Member, 71.
- GOUGH, WILLIAM JOSEPH.—Transferred to Grade of Member, 582.
- GOULD, HARRY MADERA.—Death announced, 637.
- GOULD, ROBERT RUTLEDGE.—Elected an Associate Member, 308.
- GRAETER, GEORGE CHRISTIAN.—Elected an Associate Member, 634.
- GRAFF, GEORGE WASHINGTON.—Elected a Junior, 71.
- GRAHAM, ROLAND RUSSELL.—Elected a Junior, 397.
- GRANBERY, J. H.—Exhibition by, Of Military Accoutrements from French Front, 399.
- GRAY, HOWARD ALLISON.—Elected an Associate Member, 396.
- GREEN, CHARLES NEWTON.—Transferred to Grade of Member, 401.
- GREENE, HOWARD ARNOLD.—Death announced, 197.
- GREENOUGH, M. B.—Discussion by, 70.
- GREENWOOD, ELMER ELLSWORTH.—Elected a Member, 396.

GREGORY.

- GREGORY, CHARLES E.—Discussion by, 246.
- GREGORY, JOHN H.—Appointed to Represent Society at Joint Conference on American Engineering Standards, 74.
- GREHAN, BERNARD HENRY.—Elected a Junior, 397.
- GREINER, J. C.—On Publication Committee, 76; On Engineering Societies Section of Committee on Science and Research of Advisory Commission, Council of National Defense, 640.
- GRIFFIN, AUGUSTUS.—Transferred to Grade of Member, 636.
- GRIFFIN, GEORGE APPLETON.—Elected an Associate Member, 308.
- GRIMSHAW, JAMES WALTER.—Death announced, 399.
- GRISWOLD, HECTOR CLINTON.—Elected a Junior, 248.
- GRONER, TRYGVE DANIEL BODTKER.—Transferred to Grade of Member, 401.
- GROVE, WILLIAM GARRETT.—Transferred to Grade of Member, 309.
- GROVE, WILLIAM GARRETT, and HENRY TAYLOR.—Awarded the James Laurie Prize, 66, 79.
- GRUETZMACHER, CLARENCE SAYLOR.—Elected an Associate Member, 396.
- GRUNAUER, MORTIMER.—Transferred to Grade of Associate Member, 248.
- GUPTILL, JOSEPH RICKER.—Elected a Junior, 582.
- GURNEY, LESTER.—Transferred to Grade of Associate Member, 758.
- GUTTIN, HENRY.—Elected a Member, 396.
- HAAS, EXUM MOSES.—Elected an Associate Member, 247.
- HADLEY, HOMER MORE.—Transferred to Grade of Associate Member, 636.
- HALE, HERBERT MILLER.—Transferred to Grade of Member, 309.
- HALEY, ARTHUR EDWARD.—Elected a Junior, 248.
- HALL, BENJAMIN MORTIMER, JR.—Elected an Associate Member, 396.

HALL.

- HALL, OLIVER ANTRUM.—Elected an Associate Member, 755.
- HALL, WILLIAM HENRY.—Transferred to Grade of Member, 757.
- HALL, WILLIAM M.—Paper by, 197.
- HAMMATT, W. C.—On Nominating Committee, 66, 80.
- HAMMEL, VICTOR FRANK.—Transferred to Grade of Member, 636.
- HAMMOND, LEWIS MERRICK.—Transferred to Grade of Associate Member, 636.
- HANMER, FRANKLIN JOSEPH.—Elected an Associate Member, 400.
- HANSEN, JOHN MILTON.—Elected an Associate Member, 755.
- HANSEN, REINHOLD BERNHARD.—Elected a Junior, 757.
- HANSON, NEAL.—Elected an Associate Member, 400.
- HARBERT, GUY MORLEY.—Elected an Associate Member, 635.
- HARING, ALEXANDER.—Appointed Teller to Canvass Ballot for Officers, 65, 78.
- HARRAH, ORIN WILSON.—Transferred to Grade of Associate Member, 72.
- HARRIS, BORDEN BAKER.—Transferred to Grade of Member, 248.
- HARTER, ALOYSIUS FRANK.—Elected an Associate Member, 396.
- HARTFORD, FRED DAILEY.—Transferred to Grade of Associate Member, 402.
- HARTRIDGE, ALFRED LAMAR.—Elected a Member, 246.
- HARVELL, JOHN HERBERT.—Elected an Associate Member, 71.
- HARVEY, ALDEN WALES.—Elected a Junior, 401.
- HARWOOD, GEORGE A.—Letter from, 68, 109; On Publication Committee, 76; On Library Committee, 76; Resignation Accepted, As Chairman of Library Committee, 312; On Committee to Expunge Correspondence in Regard to Report of Committee on Revision of the Constitution, 638.
- HARZA, LE ROY FRANCIS.—Elected a Member, 634.
- HASKINS, JOHN CHRISTOPHER.—Transferred to Grade of Associate Member, 583.

HAUN.

- HAUN, GEORGE CLEVELAND.—Transferred to Grade of Associate Member, 73.
- HAUSER, KENNETH DOUGLASS.—Elected an Associate Member, 247.
- HAVENS, WILLIAM WESTERFIELD.—Transferred to Grade of Associate Member, 73.
- HAWES, GEORGE RAYMOND.—Transferred to Grade of Associate Member, 248.
- HAWGOOD, HARRY.—Nominated as Director, 603.
- HAWLEY, WILLIAM EVERETT.—Elected a Member, 580.
- HAYDEN, ARTHUR GUNDERSON.—Elected a Member, 580.
- HEADLEY, WILLIAM THOMAS.—Elected an Associate, 757.
- HEALEY, CHARLES FRANK.—Transferred to Grade of Member, 636.
- HEALY, FREDERIC GEORGE.—Elected an Associate Member, 635.
- HEATLEY, THOMAS.—Elected an Associate Member, 71.
- HEIMBUECHER, WALTER ALEXANDER.—Elected an Associate Member, 308.
- HELLYER, HENRY AMYATT CHAUNDY.—Elected an Associate Member, 247.
- HELMSTETTER, GEORGE ALFRED.—Transferred to Grade of Associate Member, 758.
- HEMSTREET, GEORGE P.—Discussion by, 69.
- HENDERER, WILLIAM OSWALD.—Death announced, 199.
- HENDERSON, ALFRED REID.—Elected an Associate Member, 755.
- HENDERSON, HERBERT.—Elected a Member, 634.
- HENDERSON, SAMUEL WHILDIN.—Transferred to Grade of Member, 401.
- HENDRICKS, ERNEST DEMAREST.—Elected a Member, 246.
- HENDRIE, MATTHEW CHARLES.—Elected an Associate Member, 755.
- HENNY, D. C.—Discussion by, 395.
- HERING, RUDOLPH.—Discussion by, 637.
- HERKNESS, LINDSAY COATES.—Elected an Associate Member, 247.

HERSCHEL.

- HERSCHEL, CLEMENS.—Presides at Meeting, 65, 77; Appointed to Represent Society at Water Power Development Conference, 74; Letter from, To Committee on Special Committees, 129; Discussion by, 583; On Committee to Prepare Minute on Death of James Forrest, 640.
- HEWS, WELLINGTON PRESCOTT.—Elected an Associate Member, 400.
- HICKOK, CHARLIE WILLIAM.—Elected a Junior, 248.
- HIGGINS, HERMAN KEENE.—Transferred to Grade of Member, 72.
- HILL, JOHN W.—Discussion by, 197.
- HILL, LOUIS C.—On Nominating Committee, 66, 80.
- HILL, NICHOLAS S., JR.—Discussion by, 197.
- HILL, WILLIAM R.—Elected a Director, 69, 111.
- HIMES, A. J.—On Nominating Committee, 66, 80; Discussion by, On Relations of Local Associations to the Society, etc., 586.
- HINDS, ARTHUR KLOCK.—Transferred to Grade of Associate Member, 310.
- HINKLE, ALBERT HARRISON.—Transferred to Grade of Member, 757.
- HIRZEL, ALFRED SPARKS.—Transferred to Grade of Associate Member, 758.
- "History of Little Rock Junction Railway Bridge, of the St. Louis, Iron Mountain and Southern Railway Company, over the Arkansas River at Little Rock, Arkansas, 1883-1914", Awarded the J. James R. Croes Medal, 66, 79.
- HOAR, ALLEN.—Transferred to Grade of Associate Member, 636.
- HOFFMAN, EUGENE ROBERT.—Elected an Associate Member, 396.
- HOLBORN, LEWIS ADAMS.—Elected a Junior, 582.
- HOLBY, FRANK AVIL.—Elected a Member, 246.
- HOLLAND, CLIFFORD MILBURN.—Transferred to Grade of Member, 309; On Committee of Arrangements for Annual Meeting, 761.

HOLLINGSWORTH.

- HOLLINGSWORTH, HORACE WRIGHT.—Elected an Associate Member, 71.
 HOLMES, HUGH BROWNING.—Elected an Associate Member, 755.
 HOLTSLOW, CHARLES HENRY.—Elected an Associate Member, 635.
 HOOPES, EDGAR MALIN, JR.—Elected an Associate Member, 308.
 HOOVER, ANDREW PEARSON.—Transferred to Grade of Member, 582.
 HOPKINS, WILLIAM TRENHOLM.—Elected a Junior, 757.
 HORMEL, ALFRED ALBERT.—Elected an Associate Member, 308.
 HORNER, WESLEY WINANS.—Transferred to Grade of Member, 582.
 HOUSE, F. E.—On Committee of Arrangements for Annual Convention, 252.
 HOUSEHOLDER, FRANK JOHNSON.—Elected an Associate Member, 635.
 HOUSER, SHALER CHARLES.—Transferred to Grade of Member, 582.
 HOUSTON, ROBERT BRUCE.—Elected an Associate Member, 308.
 HOWARD, J. W.—Discussion by, 70.
 HOWARD, JOEL MANNING.—Death announced, 530.
 HOWARD, OLIVER ZELL.—Transferred to Grade of Member, 398.
 HOWE, CLARENCE DECATUR.—Transferred to Grade of Member, 401.
 HOWELL, CLARENCE SCOTT.—Elected an Associate Member, 755.
 HOYT, JOHN C.—Letter from, Relative to Publication of Correspondence in Regard to Report of Committee on Revision of the Constitution, 640.
 HOYT, W. H.—On Committee of Arrangements for Annual Convention, 252.
 HUBBARD, PRÉVOST.—Discussion by, 69, 70.
 HUBER, JOSEPH EARL.—Elected an Associate Member, 396.
 HUBER, WALTER LEROY.—Transferred to Grade of Member, 401.
 HUCKABY, MARION COLUMBUS.—Elected a Junior, 635.
 HUGHES, F. D.—Discussion by, 754.
 HULSART, C. R.—Discussion by, 70.
 HULSIZER, WILLIAM HILL.—Elected an Associate Member, 396.

HUMANN.

- HUMANN, EDWIN AUGUST.—Elected a Junior, 757.
 HUMPHREY, THOMAS PAUL.—Elected an Associate Member, 755.
 HUMPHREYS, ALEXANDER C.—On Finance Committee, 76; On Engineering Council, 644.
 HUMPHREYS, EWING SLOAN.—Transferred to Grade of Associate Member, 398.
 HUNT, ANDREW M.—Nominated as Director, 603.
 HUNT, CHARLES WARREN.—Appointed to Represent Society on United Engineering Society Board, 74; Elected Secretary, 76; On Library Committee, 76; On Committee of Arrangements for Annual Convention, 252; On General Conference Committee of the National Engineering Societies, 640; Paper by, 754; On Committee of Arrangements for Annual Meeting, 761.
 HUNT, CHESTER ROBERT.—Elected an Associate Member, 308.
 HUNT, JAMES O'CONNOR.—Elected an Associate Member, 756.
 HUNT, NELSON BARNES.—Elected an Associate Member, 581.
 HUNTER, JOSEPH GREENWOOD.—Elected an Associate Member, 756.
 HUNTER, WILLIAM HENRY.—Death announced, 310.
 HURLBUT, HINMAN BARRETT.—Transferred to Grade of Member, 401.
 HUSTED, ALVA GUY.—Elected an Associate Member, 581.
 HUTCHINSON, FRANK.—Elected a Member, 246.
 HYATT, CALEB.—Discussion by, 69.
 HYDE, RICHARD LEWIS.—Elected a Junior, 582.
 HYDE, WILLIAM HERBERT.—Death announced, 310.
 "Hydraulic Phenomena and the Effect of Spreading of Flood Water in the San Bernardino Basin, Southern California", presented and discussed, 634.
 HYNDS, HAROLD DEVILLO.—Elected an Associate Member, 71.
 Illinois Association.—Abstract of Minutes of Meeting of, 204.

INGHAM.

- INGHAM, EDWIN AMBLER.—Transferred to Grade of Associate Member, 73.
- IRWIN, BOYLE.—Transferred to Grade of Associate Member, 248.
- IRWIN, JOHN PRESTON.—Elected an Associate Member, 308.
- JACKSON, STUART WILSON.—Transferred to Grade of Member, 248.
- JACOBS, JOSEPH.—Letter from, Relative to the Relations of Local Associations to the Society, etc., 588.
- JACOBS, NATHAN BERND.—Elected a Junior, 582.
- JAKOBSEN, BERNHARD FAABORG.—Elected an Associate Member, 635.
- JAMISON, GEORGE HOLT.—Elected an Associate Member, 308.
- JEBEJIAN, NEJIB HOVHANNES.—Elected an Associate Member, 756.
- JENKINS, JAMES EDGAR.—Death announced, 530.
- JENKS, HARRY NEVILLE.—Elected a Junior, 397.
- JERRARD, LEIGH PATTERSON.—Paper by, 1; Transferred to Grade of Associate Member, 636.
- JESSEN, NILS HERMAN BAASHUUS.—Elected a Member, 634.
- John Fritz Medal.—Award of, 3, 403; Announcement Relative to Book on, 251; Announcement Relative to Award of, 251; List of Recipients of, 404; Appointment of Representative of Society on, 645.
- JOHNSON, A. N.—Discussion by, 69, 70.
- JOHNSON, DAVID CLAYTON.—Transferred to Grade of Member, 757.
- JOHNSON, HALBERT THEODORE.—Elected an Associate Member, 308.
- JOHNSON, HOLLISTER.—Elected an Associate Member, 396.
- JOHNSON, JOHN MONROE.—Elected an Associate Member, 756.
- JOHNSON, R. D.—Discussion by, 637.
- JOHNSON, WILLIAM STONE.—Death announced, 754.
- JOHNSTON, J. A.—Discussion by, 69.
- JOHNSTON, JAMES HOUSTOUN.—Elected a Member, 246.

JOHNTZ.

- JOHNTZ, ALBERT FREDERICK.—Elected an Associate Member, 635.
- Joint Committee on Adoption of the Metric System.—Resolution of Board of Direction Relative to Enlargement of, 641.
- Joint Committee on Organization of an American Engineering Standards Committee.—Report of, 414.
- Joint Conference on American Engineering Standards.—Appointment of Representatives of Society to, 74.
- JONAH, FRANK G.—On Committee to Report on Proper Relations of Local Associations to Society, etc., 75; On Finance Committee, 76; On Committee of Arrangements for Annual Convention, 252; Resignation Accepted as Member of the Board of Direction, 642.
- JONES, PERCIVAL CHARLES.—Elected an Associate Member, 396.
- JONES, ROBERT LEROY.—Elected an Associate Member, 396.
- JONES, WILLIAM DONELSON.—Elected an Associate Member, 635.
- JONES, WILLIAM NELSON.—Transferred to Grade of Member, 582.
- JORDAN, LORING KENNETH.—Elected an Associate Member, 247.
- JORGENSEN, L. R.—Paper by, 307.
- JOY, FREDERICK MERRICK.—Elected a Member, 246.
- JUENGST, WILLIAM GEORGE.—Elected an Associate Member, 756.
- KAHLER, CHARLES PORTERFIELD.—Elected an Associate Member, 247.
- KAHN, JULIUS.—Transferred to Grade of Member, 72.
- KAISER, BENEDICT JOSEPH.—Elected an Associate Member, 635.
- KALBERG, SWAN AUGUST.—Elected an Associate Member, 756.
- KANE, DANIEL COUGHLIN.—Elected a Junior, 71.
- KATTÉ, WALTER.—Death announced, 199.
- KAUFFMANN, CHARLES EMIL.—Elected a Member, 580.
- KAUFMANN, ERNST GUSTAV.—Transferred to Grade of Associate Member, 397.

KEARNEY.

- KEARNEY, JAMES.—Elected an Associate Member, 308.
- KEYS, RAYMOND JOSEPH.—Elected a Junior, 248.
- KEITH, GERALD MARCY.—Elected a Junior, 582.
- KELLY, HUGH A.—Discussion by, 1.
- KERR, RAYMOND EARL.—Elected an Associate Member, 247.
- KETCHAM, VALENTINE ODELL.—Elected an Associate Member, 247.
- KETCHUM, MILO S.—Nominated as Director, 603.
- KEYSER, CHARLES PAUL.—Elected a Member, 246.
- KIBBEY, GERALD STURTEVANT.—Elected an Associate Member, 396.
- KILLOUGH, EDWARD MATHIAS.—Elected an Associate Member, 756.
- KING, HOWARD LANGDON.—Elected a Junior, 309.
- KING, W. I.—Discussion by, 1.
- KINNE, CHARLES COMFORT.—Elected an Associate Member, 71.
- KINNEY, W. M.—Discussion by, 69, 70.
- KIRSTEIN, PAUL ROBERT.—Elected an Associate Member, 396.
- KITCHEN, ERNEST.—Elected an Associate Member, 247.
- KITTREDGE, GEORGE W.—Elected a Vice-President, 69, 111; On Finance Committee, 76; Presides at Meeting, 245; On Committee to Prepare Minute on Death of James Forrest, 640.
- KLUEGEL, HARRY ATLARDT.—Elected a Member, 396.
- KNAPP, FRANK HIRAM.—Elected an Associate Member, 635.
- KNIGHT, ARTHUR JULIUS.—Elected an Associate Member, 400.
- KNOETTGE, CARL HARMAN.—Transferred to Grade of Associate Member, 248.
- KNOLLMAN, ENNO PAUL.—Elected an Associate Member, 396.
- KNOT, WILLIAM ARNOLD.—Elected a Junior, 309.
- KNOWLES, S. A.—Discussion by, 70.
- KORNFELD, HARRY.—Transferred to Grade of Associate Member, 636.

KRAEMER.

- KRAEMER, ADONIS WILLIAM.—Elected an Associate Member, 397.
- LABSAP, ALFRED HARRY.—Elected an Associate Member, 247.
- LA DU, DWIGHT B.—On Nominating Committee, 66, 80; Transferred to Grade of Member, 582.
- LAMB, LYMAN CALVIN.—Elected an Associate Member, 400.
- LAMB, RICHARD.—Discussion by, 310.
- LAMBERT, EDWARD ALLYN.—Elected an Associate Member, 397.
- LANE, E. W.—Discussion by, 529.
- LANDALE, JOHN.—Elected an Associate Member, 581.
- LAROCHE, ARTHUR LEWIS.—Elected an Associate Member, 397.
- LARSON, MORGAN FOSTER.—Elected an Associate Member, 397.
- LARUE, HARRY ANDERSON.—Elected an Associate Member, 756.
- LATEY, HENRY N.—Appointed to Represent Society at Joint Conference on American Engineering Standards, 74.
- LAUCHLI, E.—Discussion by, 70.
- LAVERY, SAMUEL PERRY.—Elected a Junior, 757.
- LAWRENCE, FRANK ELMAKER.—Elected an Associate Member, 756.
- LAWRIE, JAMES ALBRO.—Elected an Associate Member, 581.
- Lawrie Prize.—Award of, 66, 79.
- LAYFIELD, E. N.—On Committee on Employment Bureau, 314.
- LEAL, HENRY WAY.—Elected an Associate Member, 635.
- LEAVITT, THOMAS SYLVESTER.—Elected an Associate Member, 71.
- LEDoux, J. W.—Discussion by, 246.
- LEE, CHARLES H.—Discussion by, 634.
- LEFEVER, KENNETH WINANS.—Elected a Junior, 582.
- LEON, HARRY MCCONNELL.—Elected an Associate Member, 756.
- LEVY, JOSEPH IRWIN.—Elected a Junior, 757.
- LEWALD, ALFRED.—Elected an Associate Member, 756.
- LEWIS, CHESTER BROOKS.—Transferred to Grade of Associate Member, 248.

LEWIS.

- LEWIS, EUGENE CASTNER.—Death announced, 199.
- LEWIS, N. P.—Presents Final Report of Special Committee to Investigate the Conditions of Employment of, and Compensation of, Civil Engineers, 67, 91; Nominated as Vice-President, 603.
- Library.—Accessions to the, 24, 153, 210, 263, 354, 436, 541, 612, 692, 771; Report of Secretary Relative to the Removal of, 312; Resolution of Board of Direction Relative to Transfer of Ownership of, 312; Report of Committee on Disposal of Duplicates in, 640.
- Library Committee. — Appointment of, 76; New Chairman Appointed, 312; Report of, 642, 671.
- Licensing of Architects.—Letter from, and Resolution by, San Diego Association Relative to Proposed Bill for, In California, 313, 341; Text of Proposed Bill for, In California, 334.
- Licensing of Engineers.—Text of Bill for the, Adopted by the State Legislature of Florida, 408.
- LINDENTHAL, GUSTAV. — Discussion by, 753.
- LITTLE, WALTER COLTON, JR.—Elected an Associate Member, 247.
- LLOYD, HENRY.—Elected an Associate Member, 400.
- Local Associations. — Abstract of Minutes of Meetings of, 7, 142, 143, 144, 145, 147, 149, 202, 203, 204, 205, 207, 254, 256, 258, 347, 348, 350, 420, 421, 422, 424, 426, 427, 428, 533, 534, 535, 538, 606, 608, 682, 684, 685, 686, 687, 764, 765, 766, 767; Constitution of Nebraska Association Approved, 75; Letters from, Regarding Proper Relations of, To Society, etc., 75; Appointment of Committee on Relations of, To Society, etc., 75; Statement Relative to Technical and Non-Technical Committees of the Colorado Association, 136; Report of Committee on Proper Relations of, To Society, etc., 312, 327; Revised

LOCKE.

- Constitution of Baltimore Association Approved, 313; Letter from, and Resolution by, San Diego Association Relative to Proposed Bill for Licensing of Architects in California, etc., 313, 341; Constitution of Duluth Association Approved, 313; Discussion on Report of Committee on Proper Relations of, To Society, etc., 584; Letter from Secretary of District of Columbia Association Relative to Publication of Correspondence in Regard to Report of Committee on Revision of the Constitution, 640; Presentation to Cleveland Association of Duplicates in Library, 640.
- LOCKE, FRANKLIN BUCHANAN. — Death announced, 399.
- LOCKHARDT, WILLIAM FRANCIS. — Elected a Junior, 635.
- LOCKWOOD, RICHARD JOHN.—Transferred to Grade of Member, 582.
- LOEWENSTEIN, JACOB. — Transferred to Grade of Member, 248.
- LOGAN, VERNON LEMLEY.—Elected a Junior, 757.
- LOHR, WILLIAM SHANNON.—Elected an Associate Member, 635.
- LORD, ARTHUR RUSSELL.—Elected an Associate Member, 247.
- LOVE, WILLIAM LEWIS.—Elected an Associate Member, 756.
- LUCAS, GEORGE LATMORE.—Transferred to Grade of Member, 72.
- LUCCHETTI-OTERO, ANTONIO SEBASTIAN.—Transferred to Grade of Associate Member, 248.
- LUDLOW, JUSTIN WYMAN.—Transferred to Grade of Member, 72.
- LUEDKE, ARTHUR LEWIS.—Elected an Associate Member, 247.
- LUMSDEN, HUGH JOHN.—Elected an Associate Member, 635.
- LUND, ALFRED MAJENDIE. — Transferred to Grade of Member, 309.
- LUZZATTO, JOSEPH GIOVANNI. — Elected an Associate Member, 247.
- LYNDON, LAMAR.—Elected a Member, 396.
- LYTEL, JAMES LEONARD.—Transferred to Grade of Member, 582.

MACARTHUR.

- MACARTHUR, JOHN R.—Address by, 249.
- MACCALLUM, ALEXANDER WILLIAM.—Death announced, 199.
- MACGREGOR, R. A.—Discussion by, 70.
- MACHEN, HENRY B.—Appointed Teller to Canvass Ballot for Officers, 65, 78; Discussion by, 395.
- MACKALL, JOHN NATHANIEL.—Transferred to Grade of Member, 398.
- MACKENZIE, KENNETH KING.—Elected an Associate Member, 581.
- MACLEAN, CHARLES EDWARD.—Elected an Associate Member, 400.
- MACNAUGHTON, PERCIVAL JOHN.—Elected an Associate Member, 397.
- MACQUEEN, PHILIP OUTERBRIDGE.—Elected an Associate Member, 756.
- MCCLINTOCK, J. R.—Discussion by, 2.
- MCCLUNG, DAVID ARTHUR.—Elected a Junior, 582.
- MCCLURE, HUNTER.—Transferred to Grade of Associate Member, 637.
- MCCLUSKY, WILLIAM OLIVER, JR.—Elected an Associate Member, 397.
- MCCOLLOM, THOMAS CHALMERS.—Death announced, 73.
- MCCONNELL, EDWARD HERBERT.—Elected an Associate Member, 247.
- MCCOOL, DANIEL.—Death announced, 2.
- MCCOOL, HARRY ENGLAND.—Elected an Associate Member, 635.
- MCCREA, CHARLES HAROLD.—Elected a Junior, 757.
- MCCULLOUGH, GEORGE SEYMOUR.—Elected a Junior, 397.
- MCDONALD, HUNTER.—On Committee to Report on Proper Relations of Local Associations to Society, etc., 75; Resolution by, Relative to Proposed Revised Constitution, 647.
- MCDONALD, WILLIAM FREDERICK.—Elected an Associate Member, 635.

MCDONNELL.

- MCDONNELL, FRANCIS REGIS.—Elected an Associate Member, 581.
- MCGLASHAN, HARRY DEYOE.—Transferred to Grade of Member, 582.
- MCINTYRE, WILLIAM JOHN.—Elected a Junior, 757.
- McKERCHER, CHARLES WILLIAM HOSKINS.—Elected an Associate Member, 756.
- McKIM, ALEXANDER RICE.—Discussion by, 633.
- McKINNELL, FREDERIC BERKLY.—Elected an Associate Member, 581.
- McLANE, GLENWOOD LYLE.—Elected a Member, 308.
- McMILLAN, FRANKLIN R.—Elected an Associate Member, 581.
- McMULLEN, RAY WEBB.—Transferred to Grade of Associate Member, 583.
- McWHORTER, ROGER BARTON.—Elected an Associate Member, 247.
- McWILLIAMS, SAMUEL ALEXANDER.—Transferred to Grade of Associate Member, 248.
- MADDOX, LUTHER ROBINSON.—Elected an Associate Member, 247.
- MAHNKEN, ALFRED JOHN.—Elected a Junior, 401.
- MAIER, H. L.—Discussion by, 70.
- MAILEY, JOHN BRUCE.—Transferred to Grade of Associate Member, 398.
- MALLOY, JOHN MICHAEL.—Elected an Associate Member, 756.
- MANDELZWEIG, HYMAN HARRY.—Elected an Associate Member, 397.
- MANN, C. R.—Address by, 66, 82.
- MANSFIELD, NEWTON.—Elected a Member, 580.
- MANSFIELD, ROYAL JOHN.—Transferred to Grade of Member, 757.
- MANZANILLA Y CARBONELL, JOSÉ JUSTO.—Transferred to Grade of Associate Member, 402.
- MARKER, WILLIAM MAXWELL.—Elected a Junior, 637.
- MARR, WILLIAM WALTER.—Death announced, 637.

MARSH.

MARSH, ROBERT, JR.—Elected an Associate Member, 581.
 MARSTON, FRANK ALWYN.—Transferred to Grade of Associate Member, 583.
 MARTIN, LEWIS M.—Transferred to Grade of Member, 582.
 MASLEN, HAROLD CARPENTER.—Elected a Junior, 72.
 MASSEI, CAESAR.—Transferred to Grade of Associate Member, 583.
 MATTHEWS, ALBERT CLARK, JR.—Elected a Junior, 636.
 MATTIMORE, H. S.—Discussion by, 69, 70.
 MAUL, THEODORE RUSSELL.—Elected an Associate Member, 247.
 MAY, CHARLES CULBERTSON.—Elected an Associate Member, 581.
 MAYO, FRANKLIN F.—Discussion by, 1.
 MAXIM, Sir HIRAM STEVENS.—Death announced, 73.
 MEAD, ROYAL LEE.—Elected an Associate Member, 756.
 MEAD, WILLIAM HENRY.—Elected an Associate Member, 756.
 MEDINE, SIMON.—Elected a Junior, 72.
 MEEKER, R. A.—Discussion by, 70.
 MELIN, REYNOLD FERDINAND.—Elected an Associate Member, 756.
 MELTZER, JOSEPH.—Elected an Associate Member, 308.
 Membership.—Additions, 27, 156, 213, 267, 356, 453, 546, 618, 720, 806; Changes of Address, 214, 271, 359, 465, 546, 623, 725; 810; Reinstatements, 160, 367, 485; Resignations, 31, 160, 367, 486, 736; Deaths, 32, 160, 220, 278, 367, 486, 554, 631, 736, 817.
 MERCIER, PAUL EMILE.—Elected a Member, 754.
 MERCKEL, FREDERICK GEORGE.—Elected a Junior, 309.
 MERRIAM, CHARLES ALLEN.—Elected an Associate Member, 400.
 MERRILL, ROBERT HALL.—Transferred to Grade of Member, 582.
 MERRIMAN, MANSFIELD.—Discussion by, 529.
 METCALF, LEONARD.—Letter from, Relative to Proposed Revised Constitution, 647.

METCALFE.

METCALFE, ALFRED HAROLD.—Elected an Associate Member, 247.
 Metric Equivalents in Publications of Society.—Report of Publication Committee on Use of, 642.
 Metric System, Joint Committee on Adoption of the.—Resolution of Board of Direction on Enlargement of, 641.
 MEYER, A. F.—On Committee of Arrangements for Annual Convention, 252.
 MEYER, CHARLES LOUIS.—Elected an Associate Member, 247.
 MICKEY, CLARK EDWIN.—Discussion by, 69, 70; Transferred to Grade of Associate Member, 636.
 MILHAN, DAVID NELSON.—Elected a Junior, 72.
 Military Census and Inventory, State.—Letters of Thanks for Assistance Given by Society in Work of Taking, 645.
 Military Engineering Committee of New York.—Correspondence by, Relative to Request for Co-Operation, 313; Letter from, Relative to Request of Ordnance Department for Men of Mechanical Trades for War Service, 754.
 Military Training and Service.—Resolutions of Board of Direction Relative to Universal, 308, 314, 331; Report on Replies Received Relative to, 640.
 MILLER, HARVEY COOPER.—Death announced, 758.
 MILLER, LORA WALTER.—Death announced, 197.
 MILLER, MELVILLE SAMPSON.—Elected an Associate Member, 635.
 MILLER, RICHARD LEVI.—Elected a Member, 246.
 MILLER, ROBERT PATCHEN.—Elected an Associate Member, 756.
 MILLER, STANLEY ALFRED.—Death announced, 399; Resolution Authorizing Appointment of Committee to Communicate with State Department Relative to Indemnity for Death of, 530.
 MILLER, WILLIAM CHRISTIAN.—Elected an Associate Member, 397.
 MILLS, CHARLES PHILIP.—Elected a Junior, 757.

MILLS.

- MILLS, GUY G.—Transferred to Grade of Associate Member, 310.
 Minutes of Meeting of Executive Committee of Board of Direction, 639.
 Minutes of Meetings of Special Committees, 150, 207, 260, 429, 431, 432, 609, 688, 689.
 Minutes of Meetings of the Board of Direction, 73, 75, 76, 249, 311, 314, 402, 638, 641, 642, 647, 758.
 Minutes of Meetings of the Society, 1, 2, 65, 69, 70, 77, 197, 198, 245, 246, 249, 307, 310, 395, 399, 529, 579, 583, 633, 637, 753, 754.
 MITCHEL, JOHN PURROY. — Letter from, Relative to Assistance Given by Society in Work of Taking State Military Census, 645.
 MOBERLY, HENRY PEYTON.—Transferred to Grade of Member, 248.
 "Modern Practice in Wood Stave Pipe Design, and Suggestions for Standard Specifications," presented and discussed, 395.
 MOELLER, HENRY LEWIS.—Elected an Associate Member, 755.
 MOFFETT, JOHN WILLIAM.—Elected an Associate Member, 581.
 MOISSEIFF, L. S.—Discussion by, 753.
 MOLLER, IRVING CLARK.—Elected an Associate Member, 247.
 MONK, PERCY SHELLEY.—Transferred to Grade of Associate Member, 248.
 Monthly List of Engineering Articles of Interest, 34, 162, 221, 279, 368, 487, 555, 631, 737, 818.
 MOORE, CLIFFORD B. — Appointed Teller to Canvass Ballot for Officers, 65, 78.
 MOORE, FRED F.—Discussion by, 246.
 MOORE, STANLEY WALLACE.—Transferred to Grade of Associate Member, 583.
 MORELOCK, JOHN EARL.—Elected an Associate Member, 400.
 MOREY, EDWARD FRANCIS.—Elected an Associate Member, 581.
 MORGAN, ARTHUR E.—Discussion by, 633, 637.
 MORGAN, THOMAS CHARLES.—Elected a Junior, 397.

MORIARTY.

- MORIARTY, CLARENCE.—Elected an Associate Member, 247.
 MORRISON, GILBERT.—Elected an Associate Member, 756.
 MORRISON, ROGER LEROY. — Transferred to Grade of Associate Member, 583.
 MOSS, JEROME AARON.—Elected an Associate Member, 581.
 MOULD, GEORGE ALEXANDER HUTCHINGS.—Death announced, 73.
 MOULTON, HERBERT GEORGE.—Elected a Member, 246; Discussion by, 308.
 MUESTER, ROLAND AUGUST.—Elected a Junior, 248.
 MULHOLLAND, WILLIAM.—Discussion by, 634.
 MULLEN, CHARLES AUGUSTINE. — Elected an Associate Member, 756.
 MULLEN, CHARLES WARD.—Elected a Member, 580.
 "Multiple-Arch Dams on Rush Creek, California," presented and discussed, 307.
 MURDOCH, RUSSELL ALGER.—Elected an Associate Member, 581.
 MURPHY, ALVIN RUSH.—Transferred to Grade of Associate Member, 583.
 MURPHY, KENDALL TUTTLE.—Elected an Associate Member, 635.
 MURRAY, CLIFFORD EATON.—Transferred to Grade of Associate Member, 398.
 MURRAY, JAMES LEE.—Elected an Associate Member, 635.
 NABOW, DAVID.—Elected a Junior, 397.
 NAGLER, FLOYD A.—Paper by, 529.
 NANCE, ARCHIBALD WHITFIELD. — Elected an Associate Member, 581.
 National Water Law, Special Committee on.—Progress Report of, 86; Report of Committee on Special Committees on Work of, and Appropriation for, 127; Change of Name of, Suggested and Adopted, 73, 127.
 Nebraska Association.—Constitution Approved, 75; Abstract of Minutes of Meetings of, 145, 350, 424, 765.

NEEDHAM.

- NEEDHAM, EGBERT STEPHEN. — Elected an Associate Member, 756.
- NEIBERT, JAMES SHIVELY. — Elected an Associate Member, 397.
- NEINKEN, MORTIMER LOUIS. — Elected a Junior, 636.
- NELSON, ERNEST BENJAMIN. — Transferred to Grade of Associate Member, 398.
- NEWELL, F. H. — On Committee on Employment Bureau, 314; On Engineering Council, 644.
- NEWKIRK, SAMUEL FRANK. — Transferred to Grade of Associate Member, 758.
- NICHOLS, ARTHUR CLOUGH. — Elected a Junior, 401.
- NICHOLSON, GEORGE FRANCES. — Elected an Associate Member, 397.
- NOBLE, FREDERICK C. — Elected a Director, 73; On Publication Committee, 76; On Committee to Expunge Correspondence in Regard to Report of Committee on Revision of the Constitution, 638.
- Noble Memorial. — Statement of Work of Committee on, 70, 137; Progress Report of Committee on, 312, 645, 648; Appointment of Member of Committee on, 313.
- Nominations, Committee on. — Report of Tellers Appointed to Canvass Suggestions for, 66, 79; Presents List of Nominees, 603; Report of, 642; Appointment of Committee of Board of Direction to Canvass Preliminary Suggestions for Members of, Authorized, 645; Dates Fixed for Mailing Form for, and Canvassing of, Final Suggestions for Members of, 645.
- Norman Medal. — Award of, 66, 79.
- NORRIS, CLAIRE GREEN. — Elected an Associate Member, 756.
- NORRIS, ROBERT. — Elected an Associate Member, 756.
- NORTON, JOHN EVERED. — Elected an Associate Member, 581.
- NOYES, EDWARD NEWTON. — Transferred to Grade of Member, 72.
- NUMATA, HISANORI. — Elected a Member, 396.

OBERMEYER.

- OBERMEYER, WALTER SCOTT. — Transferred to Grade of Associate Member, 310.
- "Obstruction of Bridge Piers to the Flow of Water," presented and discussed, 529.
- Officers of the Society. — Authorization by Board of Direction of Explanatory Foot-Note Relative to Salaries of, 75; Resolution of Board of Direction Relative to Recommendations to Office or Position by, 313.
- OKEY, CHARLES W. — Paper by, 637.
- OLDS, ALBERT ROY. — Elected an Associate Member, 397.
- O'NEILL, OWEN HUGH. — Elected an Associate Member, 756.
- O'ROURKE, FRANK HUGH. — Elected an Associate Member, 397.
- OSBORN, FRANK C. — Resigns as Member of Special Committee on Steel Columns and Struts, 313.
- OXER, GEORGE CARROL. — Elected an Associate Member, 756.
- PAINE, ALLEN THATCHER. — Elected an Associate Member, 581.
- PARKER, HAROLD. — Death announced, 2.
- PARKER, JAMES. — Elected a Junior, 636.
- PARKER, KINGSBURY EASTMAN. — Transferred to Grade of Associate Member, 398.
- PARSONS, WILLIAM BARCLAY. — Paper by, 583.
- PARTRIDGE, J. F. — Paper by, 395.
- PATTERSON, CHARLES SCOTT. — Transferred to Grade of Associate Member, 73.
- PAXTON, THOMAS PRESTON. — Elected an Associate Member, 400.
- PEABODY, ALONZO ORRAN. — Elected an Associate Member, 308.
- PEARL, WALTER. — Discussion by, 308.
- PEARSON, HARRY BROWNLEY, JR. — Transferred to Grade of Associate Member, 758.
- PEGRAM, GEORGE H. — Elected President, 69, 111; Address by, 69, 112; Presides at Meeting, 197, 198, 249, 395, 399, 529, 637, 754; Resolution of Board of Direction Relative to Annual Address as

PENICK.

- President, 641; On John Fritz Medal Board of Award, 645.
- PENICK, DIXON BROWN.—Elected an Associate Member, 71.
- PENN, WILLIAM CLAY.—Elected an Associate Member, 400.
- PEOTTER, REUBEN SYLVESTER.—Transferred to Grade of Member, 636.
- PEREIRA, ARMANDO DE ARRUDA.—Elected a Junior, 72.
- PERKINS, ALVA HAROLD.—Elected an Associate Member, 635.
- PERKINS, SETH.—Elected a Member, 580.
- PERKINS, SETH, JR.—Elected an Associate Member, 756.
- PERKINS, W. C. W.—Discussion by, 70.
- PERRINE, HAROLD.—Transferred to Grade of Associate Member, 249.
- PERRINE, HAROLD, AND GEORGE E. STREHAN.—Awarded the Collingwood Prize, 66, 79.
- PERRY, ARTHUR FRANKLIN, JR.—Elected a Junior, 757.
- PERSONS, VICTOR SMITH.—Elected an Associate Member, 400.
- PETERS, ALBERT AYER.—Elected an Associate Member, 71.
- PETERS, WILLIAM FREDERICK.—Elected an Associate Member, 309.
- PETRY, CHARLES ALOYSIUS.—Elected an Associate Member, 756.
- PHALAN, JOHN JOSEPH FRANCIS.—Transferred to Grade of Associate Member, 398.
- PHARIS, LEROY MASTERS.—Elected an Associate Member, 309.
- PHELPS, HOWARD EASTWOOD.—Transferred to Grade of Member, 72.
- Philadelphia Association.—Minutes of Meeting of, 766.
- PHILLIPS, WILLIAM HALE.—Transferred to Grade of Member, 398.
- PICKETT, FRANK HURD.—Elected an Associate Member, 635.
- PICKETT, WILLIAM DOUGLAS.—Death announced, 249.
- PICKUS, JOSEPH.—Elected a Junior, 72.
- PIEPMEIER, BION HARMAN.—Transferred to Grade of Member, 636.
- PIERCE, CHARLES HENRY.—Transferred to Grade of Member, 582.
- PIERCE, CHARLES WILLIAM.—Elected a Junior, 309.

PIERCE.

- PIERCE, PAUL LEON.—Transferred to Grade of Member, 636.
- PITCHER, FLOYD JACOB.—Elected an Associate Member, 756.
- PLANK, DAVID HARLAN.—Elected an Associate Member, 581.
- POCKELS, WILLIAM HENRI FRANCAIS AUGUST.—Elected a Junior, 398.
- POLK, A. C., AND E. L. SAYERS.—Awarded the Thomas Fitch Rowland Prize, 66, 79.
- POLLOCK, C. D.—Discussion by, 69, 70.
- POMEROY, LEWIS ROBERTS.—Death announced, 399.
- POPERT, WILLIAM HOPF.—Transferred to Grade of Member, 309.
- PORTER, ARTHUR MILLER.—Elected an Associate Member, 247.
- POSKE, HARRY CHRISTIAN.—Elected an Associate Member, 71.
- POTTER, ALEXANDER.—Discussion by, 197.
- POWELL, CHARLES UNDERHILL.—Elected a Member, 246.
- POWELL, HERBERT JAMES BINGHAM.—Elected a Member, 580; Discussion by, 754.
- PRATT, EDMUND ADDISON.—Elected an Associate Member, 397.
- PRATT, HENRY BLANCHARD.—Transferred to Grade of Member, 72.
- President of the United States.—Telegram to, From National Engineering Societies and United Engineering Society, Supporting International Policy and Offering Assistance toward Organization of Engineers for Service, 135; Letter from, In Reply to Cablegram from Central Board, Engineers Ways of Communications of Russia, 645.
- PRICHETT, FREDERIC BORRADAILE.—Elected a Junior, 398.
- PRIDE, HAROLD ELLWOOD.—Elected a Junior, 757.
- Prizes, Committee to Recommend the Award of.—Report of, 66, 74, 79; Appointment of, Authorized, 640; Appointment of, 645.
- Public Utilities, Special Committee on Valuation of.—Final Report of, 67, 97; Discussion Relative to Discharge of, 67, 98; Report of Committee on Special Committees

PUBLICATION.

- on Work of, and Appropriation for, 126.
- Publication Committee. — Appointment of, 76; Report of, On Use of Metric Equivalents in Society Publications, 642.
- "Pulsations in Pipe Lines, as Shown by Some Recent Tests," presented and discussed, 637.
- PURVER, GEORGE MOSES.—Transferred to Grade of Member, 636.
- PYLE, CLYDE BEETHOVEN.—Elected an Associate Member, 309.
- QUARLES, BEN TARVER.—Elected an Associate Member, 756.
- QUIMBY, H. H.—Discussion by, 753.
- QUINLAN, GEORGE AUSTIN.—Transferred to Grade of Member, 72.
- QUINN, MAURICE JAMES.—Elected an Associate Member, 397.
- QUINN, THOMAS FRANCIS.—Elected an Associate Member, 581.
- RADER, FRANKLIN KEARNS.—Elected an Associate Member, 309.
- RADER, JAMES WILSON.—Elected a Junior, 309.
- RAKESTRAW, CHARLES LYSANDER.—Transferred to Grade of Associate Member, 398.
- RAMSER, CHARLES ERNEST.—Transferred to Grade of Associate Member, 402.
- RAMSEY, JOSEPH.—Death announced, 2.
- RAND, CHARLES F.—Address by, 65, 77; Letter from, Relative to Increased Cost of Addition to United Engineering Building, 74; Extracts from Annual Report of, As President of United Engineering Society, 250.
- RANDALL, FRANK ALFRED.—Transferred to Grade of Member, 310.
- RANDELL, RALPH REGINALD.—Transferred to Grade of Associate Member, 249.
- RANDLETT, F. M.—Discussion by, 308.
- RANDOLPH, ORRIN.—Discussion by, 637.
- RANDOLPH, RICHARD WOOD.—Transferred to Grade of Member, 401.

RANKIN.

- RANKIN, EDWARD S.—Discussion by, 1.
- RANNEY, ALFRED GARDNER.—Elected a Junior, 582.
- RANNEY, WILLIS.—Transferred to Grade of Member, 401.
- RANSOME, ERNEST LESLIE.—Death announced, 199.
- RAY, ROBERT BRIGHT.—Elected an Associate Member, 309.
- RAYBURN, JOHN MATTHEW.—Elected a Member, 308.
- RAYMOND, HERBERT DWIGHT. — Elected an Associate Member, 581.
- REANEY, CHARLES FRANKLIN. — Transferred to Grade of Associate Member, 73.
- "Reconstruction of the Norfolk and Western Railway Company's Bridge Over the Ohio River at Kenova, West Virginia," Awarded the James Laurie Prize, 66, 79.
- REDING, JAMES HANDYSIDE.—Elected an Associate Member, 635.
- REED, PERCY LAWRENCE.—Elected an Associate Member, 400.
- REES, BIRD LEGRAND.—Elected an Associate Member, 581.
- REESE, RAYMOND CASTLE.—Elected a Junior, 757.
- REEVE, LEROY NORMAN.—Transferred to Grade of Member, 636.
- RENSHAW, ALFRED.—Elected a Junior, 636.
- REPKO, GEORGE ANTON.—Elected a Junior, 401.
- Report of Board of Direction, 13, 66, 78.
- Report of Committee of Baltimore Association on Relations of Local Associations to the Society, etc., 584.
- Report of Committee of Board of Direction on Relations of Local Associations to the Society, etc., 312, 327; Discussion on, 584.
- Report of Committee of Seattle Association on Relations of Local Associations to the Society, etc., 587.
- Report of Committee on A National Water Law, 86.
- Report of Committee on Alfred Noble Memorial, 312, 645, 648.

REPORT.

Report of Committee on Concrete and Reinforced Concrete, 67, 86.
 Report of Committee on Disposal of Duplicates in Library, 640.
 Report of Committee on Employment Bureau, 314, 330; Resolution of Board of Direction Relative to, 314.
 Report of Committee on Engineering Education, 66, 80.
 Report of Committee on Materials for Road Construction, 67, 84; Minutes of Special Meetings for Discussion of, 69; Discussion of, 69, 70.
 Report of Committee on Nominations, 642.
 Report of Committee on Publications on Use of Metric Equivalents in Society Publications, 642.
 Report of Committee on Revision of the Constitution, 311, 315; Resolutions of Board of Direction Relative to Correspondence in Regard to, 311, 638; Appointment of Committee of Board of Direction to Expunge Correspondence in Regard to, 638; Letter Relative to Publication of Correspondence in Regard to, 640; Report of Committee of Board of Direction Appointed to Expunge Correspondence in Regard to, 646.
 Report of Committee on Special Committees, 73, 124, 404, 638.
 Report of Committee on Steel Columns and Struts, 67, 86.
 Report of Committee on Stresses in Railroad Track, 67, 100.
 Report of Committee on Valuation of Public Utilities, 67, 97.
 Report of Committee to Codify Present Practice on the Bearing Value of Soils for Foundations, 67, 99.
 Report of Committee to Investigate the Conditions of Employment of, and Compensation of, Civil Engineers, 67, 91; Discussion of, 92.
 Report of Committee to Recommend the Award of Prizes, 66, 74, 79.
 Report of Delegates to Conference on Engineering Co-Operation, 313.
 Report of Executive Committee of Board of Direction on Sale or Lease of Society House, 639.

REPORT.

Report of Joint Committee on Organization of an American Engineering Standards Committee, 414.
 Report of Library Committee, 642, 671.
 Report of Secretary, 20, 66, 78.
 Report of Secretary of Engineering Foundation Board, 673.
 Report of Secretary on Society's New Headquarters, 644, 667.
 Report of Secretary Relative to Cost of Paneling Rooms in New Society Headquarters, 639.
 Report of Secretary Relative to Removal of Library, 312.
 Report of Tellers Appointed to Canvass Ballot for Officers, 68, 110.
 Report of Tellers Appointed to Canvass Suggestions for Nominating Committee, 66, 79.
 Report of Treasurer, 23, 66, 78.
 Resolution Authorizing Appointment of Committee to Communicate with State Department Relative to Indemnity for Death of Stanley Alfred Miller, 530.
 Resolution of Board of Direction Relative to Appointment of Secretary by Representatives of Society on Engineering Council, 640.
 Resolution of Board of Direction Relative to Co-operation with Council of National Defense in Consideration of Engineering Education, 642.
 Resolution of Board of Direction Relative to Discharge of General Conference Committee of the National Engineering Societies, 640.
 Resolution of Board of Direction Relative to Enlargement of Joint Committee on the Adoption of the Metric System, 641.
 Resolution of Board of Direction Relative to Establishment of Closer Relations with Canadian Society of Civil Engineers, 642.
 Resolution of Board of Direction Relative to 1917 Annual Address of President, 641.
 Resolution of Board of Direction Relative to Powers of Executive Committee, 314.
 Resolution of Board of Direction Relative to Recommendations to

RESOLUTION.

- Office or Position by Officers of Society, 313.
- Resolution of Board of Direction Relative to Report of Committee on Employment Bureau, 314.
- Resolution of Board of Direction Relative to Transfer of Ownership of Library, 312.
- Resolution of Executive Committee of Board of Direction Relative to Remittance of Dues of Members during Military Service, 639, 673.
- Resolution of San Diego Association Relative to Proposed Bill for Licensing of Architects in California, 313, 341.
- Resolution of Thanks Extended to William P. Creager for Presentation of Paper, 308.
- Resolution Relative to Appointment of Employment Bureau, 68, 105.
- Resolution Relative to Dr. Hunt's Address on Activities of the Society, 754.
- Resolution Relative to Establishment of Student Branches of the Society, 68, 103.
- Resolution Relative to Proposed Revised Constitution, 647.
- Resolution Relative to Severance of Relations with Germany, 198.
- Resolutions of Board of Direction Relative to Correspondence in Regard to Report of Committee on Revision of the Constitution, 311, 638.
- Resolutions of Board of Direction Relative to Representation of U. E. S., etc., on Engineering Council, 312.
- Resolutions of Board of Direction Relative to Universal Military Training and Service, 308, 314, 331; Report on Replies Received Relative to, 640.
- Resolutions of Executive Committee of Board of Direction Relative to Drafting or Enlistment of Engineering Students for War Service, 759.
- Resolutions of Executive Committee of Board of Direction Relative to War Revenue Act, 672.
- Resolutions of Thanks Adopted at Annual Meeting, 68, 110.

REVELL.

- REVELL, JOHN.—Elected an Associate Member, 756.
- REYNOLDS, LEO FRANCIS.—Elected a Junior, 401.
- RHODES, HARRY WILLET.—Elected a Member, 70.
- RIBLET, HARRY GAILLARD.—Transferred to Grade of Associate Member, 637.
- RICE, JOHN MARIE THOMAS.—Transferred to Grade of Member, 401.
- RICE, JOHN TURNER.—Elected an Associate Member, 756.
- RICE, ROGER CUSHING.—Transferred to Grade of Associate Member, 637.
- RICHARDSON, CLIFFORD.—Discussion by, 69, 70.
- RICHMOND, W. S.—Letter from, Relative to Proposed Revised Constitution, 647.
- RIDDLE, WILLIAM CATHCART.—Elected an Associate Member, 400.
- RIDGWAY, ARTHUR O.—On Nominating Committee, 66, 80.
- RIDGWAY, ROBERT.—Discussion by, 2; On General Conference Committee of the National Engineering Societies, 640.
- RIEXINGER, HENRY EDWARD.—Elected an Associate Member, 247.
- RIGHTS, L. D.—Presents Progress Report of Special Committee on Steel Columns and Struts, 67, 86; Elected a Director, 69, 111; Presides at Meeting, 70, 633, 753; On Publication Committee, 76; On Library Committee, 76.
- RINEHART, CHARLES RAMSAY.—Elected an Associate Member, 397.
- RIPLEY, T. M.—Discussion by, 69.
- RITOW, HERMAN.—Elected a Junior, 636.
- Road Construction, Special Committee on Materials for.—Progress Report of, 67, 84; Minutes of Special Meetings for Discussion of Report of, 69; Discussion of Report of, 69, 70; Report of Committee on Special Committees on Work of, and Appropriation for, 125; Minutes of Meetings of, 207, 431, 609; 688, 689.

ROAKE.

- ROAKE, STEPHEN ALLEN.—Transferred to Grade of Member, 248.
 ROBBINS, F. M.—Discussion by, 395.
 ROBERTS, LEO BOND.—Elected an Associate Member, 756.
 ROBERTS, THEODORE CHARLES.—Elected a Member, 580.
 ROBERTSON, FONZIE EUGENE.—Elected a Junior, 401.
 ROBINSON, E. F.—Address by, 399.
 ROBINSON, JOHN HARVEY.—Elected an Associate Member, 71.
 ROBINSON, RUSSELL MOORE.—Transferred to Grade of Associate Member, 583.
 ROCKWELL, HARLOW LOVERIDGE.—Elected an Associate Member, 635.
 RODMAN, GEORGE EDWARD.—Elected a Member, 755.
 ROHRER, GRANT.—Death announced, 2.
 Roll of Honor.—Action by Board of Direction Relative to, 645; Members on, 698, 776.
 ROSCHE, WILBERT ROBIN.—Elected an Associate Member, 397.
 ROSE, ALSTON ORANGE.—Transferred to Grade of Associate Member, 637.
 ROSENBAUM, RAYMOND VICTOR.—Elected an Associate Member, 581.
 ROSEWATER, W. M.—Discussion by, 579.
 ROSS, ANDREW FRANCIS.—Elected an Associate Member, 400.
 ROSS, BLAIR ARTHUR.—Elected a Junior, 248.
 Rowland Prize.—Award of, 66, 79.
 RUDOLPH, WILLIAM EDWARD.—Transferred to Grade of Associate Member, 583.
 RUGGLES, GLENN A.—Elected an Associate Member, 756.
 RUHLING, GEORGE HUTZE.—Elected a Junior, 248.
 RUSSELL, WILLIAM HEPBOURNE.—Elected a Junior, 757.
 Russia, Central Board, Engineers Ways of Communications of.—Cablegram from, 645.
 RUST, HENRY P.—Discussion by, 395.
 RUTENBERG, P. P.—Discussion by, 246.

RYLAND.

- RYLAND, REIS JOSEPH.—Elected a Junior, 72.
 St. Louis Association.—Abstract of Minutes of Meetings of, 205, 685, 686, 767.
 Salaries of Officers.—Authorization by Board of Direction of Explanatory Foot-Note Relative to, 75.
 SALLE, GEORGE VIAL.—Elected an Associate Member, 635.
 SAMMELMAN, CHARLES WILLIAM SYLVERIUS.—Elected an Associate Member, 635.
 SANBORN, JAMES F.—Discussion by, 70; On Committee of Arrangements for Annual Meeting, 761.
 San Diego Association.—Abstract of Minutes of Meetings of, 9; Letter from, and Resolution by, Relative to Proposed Bill for Licensing of Architects in California, 313, 341.
 San Francisco Association.—Abstract of Minutes of Meetings of, 142, 254, 420, 421, 533, 682.
 SARGENT, ARTHUR WINTHROP.—Transferred to Grade of Member, 248.
 SARTZ, JACOB PETER.—Elected an Associate Member, 581.
 SAYERS, E. L., AND A. C. POLK.—Awarded the Thomas Fitch Rowland Prize, 66, 79.
 SCHARPENBERG, CHARLES CHRISTIAN.—Elected an Associate Member, 397.
 SCHEIDENHELM, F. W.—Paper by, 246; Discussion by, 307.
 SCHMUCKER, BEALE MELANTHON.—Elected an Associate Member, 635.
 SCHOENBERGER, GEORGE CHRISTIAN.—Elected an Associate Member, 756.
 SCHOLTZ, H. F.—Discussion by, 310.
 SCHULTZ, HAROLD AUGUST HASTRUP.—Transferred to Grade of Associate Member, 398.
 SCOTT, LEWIS PELOT.—Elected an Associate Member, 400.
 SCUDDER, HENRY DARCY, JR.—Elected an Associate Member, 756.
 SEAMAN, HENRY B.—Discussion by, 754.

STEVENS.

- STEVENS, JOHN F.—On Engineering Council, 644; Cable from, 645.
- STEVENS, SAMUEL SPAULDING.—Elected an Associate Member, 635.
- STEVENSON, MARKLEY.—Elected an Associate Member, 581.
- STOFFLET, HERBERT MILLER.—Elected an Associate Member, 635.
- STONE, SOLON JONES.—Elected a Member, 755.
- STOTT, HENRY GORDON.—Death announced, 73.
- STRACHAN, NORMAN FRASER.—Elected a Junior, 636.
- STRANEY, JOHN WILLIAM.—Elected an Associate Member, 581.
- STREHAN, GEORGE E., AND HAROLD PERRINE.—Awarded the Collingwood Prize, 66, 79.
- "Stress Measurements on the Hell Gate Arch Bridge," presented and discussed, 753.
- Stresses in Railroad Track, Special Committee on.—Progress Report of, 67, 100; Report of Committee on Special Committees on Work of, and Appropriation for, 127; Minutes of Meetings of, 260, 689; Resignation of Member of, Accepted, 313.
- STUART, EDWARD.—Elected an Associate Member, 635.
- STUART, F. L.—Discussion by, 70.
- Student Branches of the Society.—Resolution Relative to Establishment of, 68, 103.
- Students, Engineering.—Resolutions of Executive Committee Relative to Drafting or Enlistment of, 759.
- SUTTON, DAVID.—Elected an Associate Member, 756.
- SWAIN, GEORGE F.—On Engineering Council, 644.
- SWANKER, JOHN EDWARD.—Death announced, 637.
- SWANSON, WILLIAM ROBERT.—Elected a Junior, 401.
- SWAREN, JOHN WILLIAM.—Elected an Associate Member, 400.
- SWARTZ, LEON.—Transferred to Grade of Associate Member, 637.
- SWEETSER, ERNEST OSGOOD.—Elected an Associate Member, 756.
- SWEM, AMZI RAYMOND.—Elected an Associate Member, 309.

SWINTON.

- SWINTON, ROY STANLEY.—Transferred to Grade of Associate Member, 583.
- SYRETT, WALTER SUTTON.—Elected a Member, 580.
- TABER, ROCK GRANITE.—Elected an Associate Member, 400.
- TAKAHASHI, SEISUKE.—Elected an Associate Member, 71.
- TALBOT, ARTHUR N.—Presents Progress Report of Special Committee on Stresses in Railroad Track, 67, 100; Nominated as President, 603.
- TAMM, ALFRED.—Elected an Associate Member, 756.
- TANDROW, WALTER STEPHEN.—Elected an Associate Member, 71.
- TAPPAN, ROGER.—Death announced, 2.
- TATE, ROBERT L'HOMMEDET.—Transferred to Grade of Associate Member, 310.
- TAUSSIG, JOHN WRIGHT.—Transferred to Grade of Associate Member, 758.
- TAYLOR, ARTHUR.—Elected an Associate Member, 247.
- TAYLOR, GEORGE BLANEY.—Transferred to Grade of Associate Member, 249.
- TAYLOR, HAROLD ALEXANDER.—Elected an Associate Member, 309.
- TAYLOR, HENRY, AND WILLIAM G. GROVE.—Awarded the James Laurie Prize, 66, 79.
- TEIXEIRA DE MELLO, JOSÉ ALEXANDRE.—Elected a Junior, 636.
- THAXTON, RUFUS CARROLL.—Elected an Associate Member, 581.
- Tellers.—Appointment of, To Canvass Ballot for Officers, 65, 78; Report of, On Suggestions for Nominating Committee, 66, 79; Report of, On Ballot for Officers, 68, 110.
- "Tests of Concrete Specimens in Sea Water, at Boston Navy Yard", presented and discussed, 2.
- "The Activities of the American Society of Civil Engineers During the Past Twenty-five Years," presented, 754.
- "The Cape Cod Canal", presented and discussed, 583.

THE.

- "The Hell Gate Arch Bridge and Approaches of the New York Connecting Railroad Over the East River in New York City," presented and discussed, 753.
- "The Lock 12 Development of the Alabama Power Company, Coosa River, Alabama," Awarded the Thomas Fitch Rowland Prize, 66, 79.
- "The Possibilities in Bridge Construction by the Use of High-Alloy Steels," awarded the Norman Medal, 66, 79.
- "The Present Situation of the Great War," Address on, 245.
- "The Reconstruction of the Stony River Dam," presented and discussed, 246.
- "The Subsidence of Muck and Peat Soils in Southern Louisiana and Florida," presented and discussed, 637.
- "The Three 15-Cubic Yard Dipper-Dredges, *Gamboa*, *Paraiso*, and *Cascadas*, as Supplied and Used on the Panama Canal," presented and discussed, 579.
- "The Valuation of Land," presented and discussed, 1.
- "The Water Supply of Parkersburg, W. Va.," presented and discussed, 197.
- "The Work of the 22d N. Y. Engineers on the Mexican Border," Address on, 399.
- THOM, NEIL, JR.—Transferred to Grade of Associate Member, 402.
- THOMAS, CHARLES COFRAN HUBBARD.—Elected an Associate Member, 71.
- THOMAS, CHARLES RANDOLPH.—Transferred to Grade of Associate Member, 249.
- THOMAS, R. D.—On Committee of Arrangements for Annual Convention, 252.
- THOMPSON, SANFORD E.—Discussion by, 70.
- THOMSON, R. H.—Elected a Director, 69, 111.
- THOMSON, SAMUEL FORSYTHE.—Death announced, 73.
- THOMSON, T. KENNARD.—Presides at Meeting, 1; Discussion by, 2, 70, 197, 199, 308, 583, 633, 637; Address by, 754.

THOMSON.

- THOMSON, WILLIAM STEWART.—Elected a Member, 246.
- THORNTON, LOUIS EARLE.—Elected an Associate Member, 400.
- TIBBETTS, FREDERICK HORACE.—Transferred to Grade of Member, 582.
- TIDD, HARRY.—Transferred to Grade of Associate Member, 583.
- TILLSON, GEORGE W.—Presents Progress Report of Special Committee on Materials for Road Construction, 67, 84; Elected Treasurer, 69, 111; Presides at Meeting, 69; Discussion by, 70; On Committee on Special Committees, 76; Nominated as Treasurer, 603.
- TINKER, GEORGE H.—Discussion by, On Relations of Local Associations to the Society, etc., 585.
- TINKHAM, S. E.—On Committee to Recommend the Award of Prizes, 645.
- TINSLEY, ROBERT BRUCE.—Transferred to Grade of Member, 636.
- TOLMAN, EDWARD MAYO.—Transferred to Grade of Associate Member, 583.
- TOPPING, PERRY.—Transferred to Grade of Member, 582.
- TORPEN, BERNHARDT E.—Elected an Associate Member, 309.
- Treasurer.—Report of, 23, 66, 78.
- TRETEN, OTTO CHRISTIAN.—Elected an Associate Member, 397.
- TROST, ADOLPHUS GUSTAVUS.—Transferred to Grade of Member, 401.
- TROST, PAUL ANTHONY.—Elected a Member, 399.
- TROTT, DAVID CROOKER.—Transferred to Grade of Member, 582.
- TRUEHEART, EDWARD GARLAND.—Elected a Member, 246.
- TRUESDELL, STEPHEN RIGGS.—Elected a Junior, 636.
- TULLOCK, HUBERT SOUTHWICK.—Transferred to Grade of Member, 401.
- TURNER, NATHANIEL PARKER.—Transferred to Grade of Member, 582.
- TUTTLE, ARTHUR S.—On Committee of Arrangements for Annual Meeting, 761.
- TYSON, WILLIAM CLAUDE.—Elected an Associate Member, 397.

RESOLUTION.

- Office or Position by Officers of Society, 313.
- Resolution of Board of Direction Relative to Report of Committee on Employment Bureau, 314.
- Resolution of Board of Direction Relative to Transfer of Ownership of Library, 312.
- Resolution of Executive Committee of Board of Direction Relative to Remittance of Dues of Members during Military Service, 639, 673.
- Resolution of San Diego Association Relative to Proposed Bill for Licensing of Architects in California, 313, 341.
- Resolution of Thanks Extended to William P. Creager for Presentation of Paper, 308.
- Resolution Relative to Appointment of Employment Bureau, 68, 105.
- Resolution Relative to Dr. Hunt's Address on Activities of the Society, 754.
- Resolution Relative to Establishment of Student Branches of the Society, 68, 103.
- Resolution Relative to Proposed Revised Constitution, 647.
- Resolution Relative to Severance of Relations with Germany, 198.
- Resolutions of Board of Direction Relative to Correspondence in Regard to Report of Committee on Revision of the Constitution, 311, 638.
- Resolutions of Board of Direction Relative to Representation of U. E. S., etc., on Engineering Council, 312.
- Resolutions of Board of Direction Relative to Universal Military Training and Service, 308, 314, 331; Report on Replies Received Relative to, 640.
- Resolutions of Executive Committee of Board of Direction Relative to Drafting or Enlistment of Engineering Students for War Service, 759.
- Resolutions of Executive Committee of Board of Direction Relative to War Revenue Act, 672.
- Resolutions of Thanks Adopted at Annual Meeting, 68, 110.

REVELL.

- REVELL, JOHN.—Elected an Associate Member, 756.
- REYNOLDS, LEO FRANCIS.—Elected a Junior, 401.
- RHODES, HARRY WILLET.—Elected a Member, 70.
- RIBLET, HARRY GAILLARD.—Transferred to Grade of Associate Member, 637.
- RICE, JOHN MARIE THOMAS.—Transferred to Grade of Member, 401.
- RICE, JOHN TURNER.—Elected an Associate Member, 756.
- RICE, ROGER CUSHING.—Transferred to Grade of Associate Member, 637.
- RICHARDSON, CLIFFORD.—Discussion by, 69, 70.
- RICHMOND, W. S.—Letter from, Relative to Proposed Revised Constitution, 647.
- RIDDLE, WILLIAM CATHCART.—Elected an Associate Member, 400.
- RIDGWAY, ARTHUR O.—On Nominating Committee, 66, 80.
- RIDGWAY, ROBERT.—Discussion by, 2; On General Conference Committee of the National Engineering Societies, 640.
- RIEXINGER, HENRY EDWARD.—Elected an Associate Member, 247.
- RIGHTS, L. D.—Presents Progress Report of Special Committee on Steel Columns and Struts, 67, 86; Elected a Director, 69, 111; Presides at Meeting, 70, 633, 753; On Publication Committee, 76; On Library Committee, 76.
- RINEHART, CHARLES RAMSAY.—Elected an Associate Member, 397.
- RIPLEY, T. M.—Discussion by, 69.
- RITOW, HERMAN.—Elected a Junior, 636.
- Road Construction, Special Committee on Materials for.—Progress Report of, 67, 84; Minutes of Special Meetings for Discussion of Report of, 69; Discussion of Report of, 69, 70; Report of Committee on Special Committees on Work of, and Appropriation for, 125; Minutes of Meetings of, 207, 431, 609, 688, 689.

ROAKE.

- ROAKE, STEPHEN ALLEN. — Transferred to Grade of Member, 248.
 ROBBINS, F. M. — Discussion by, 395.
 ROBERTS, LEO BOND. — Elected an Associate Member, 756.
 ROBERTS, THEODORE CHARLES. — Elected a Member, 580.
 ROBERTSON, FONZIE EUGENE. — Elected a Junior, 401.
 ROBINSON, E. F. — Address by, 399.
 ROBINSON, JOHN HARVEY. — Elected an Associate Member, 71.
 ROBINSON, RUSSELL MOORE. — Transferred to Grade of Associate Member, 583.
 ROCKWELL, HARLOW LOVERIDGE. — Elected an Associate Member, 635.
 RODMAN, GEORGE EDWARD. — Elected a Member, 755.
 ROHRER, GRANT. — Death announced, 2.
 Roll of Honor. — Action by Board of Direction Relative to, 645; Members on, 698, 776.
 ROSCHE, WILBERT ROBIN. — Elected an Associate Member, 397.
 ROSE, ALSTON ORANGE. — Transferred to Grade of Associate Member, 637.
 ROSENBAUM, RAYMOND VICTOR. — Elected an Associate Member, 581.
 ROSEWATER, W. M. — Discussion by, 579.
 ROSS, ANDREW FRANCIS. — Elected an Associate Member, 400.
 ROSS, BLAIR ARTHUR. — Elected a Junior, 248.
 Rowland Prize. — Award of, 66, 79.
 RUDOLPH, WILLIAM EDWARD. — Transferred to Grade of Associate Member, 583.
 RUGGLES, GLENN A. — Elected an Associate Member, 756.
 RUHLING, GEORGE HUTZE. — Elected a Junior, 248.
 RUSSELL, WILLIAM HEPBOURNE. — Elected a Junior, 757.
 Russia, Central Board, Engineers Ways of Communications of. — Cablegram from, 645.
 RUST, HENRY P. — Discussion by, 395.
 RUTENBERG, P. P. — Discussion by, 246.

RYLAND.

- RYLAND, REIS JOSEPH. — Elected a Junior, 72.
 St. Louis Association. — Abstract of Minutes of Meetings of, 205, 685, 686, 767.
 Salaries of Officers. — Authorization by Board of Direction of Explanatory Foot-Note Relative to, 75.
 SALLE, GEORGE VIAL. — Elected an Associate Member, 635.
 SAMMELMAN, CHARLES WILLIAM SYLVERIUS. — Elected an Associate Member, 635.
 SANBORN, JAMES F. — Discussion by, 70; On Committee of Arrangements for Annual Meeting, 761.
 San Diego Association. — Abstract of Minutes of Meetings of, 9; Letter from, and Resolution by, Relative to Proposed Bill for Licensing of Architects in California, 313, 341.
 San Francisco Association. — Abstract of Minutes of Meetings of, 142, 254, 420, 421, 533, 682.
 SARGENT, ARTHUR WINTHROP. — Transferred to Grade of Member, 248.
 SARTZ, JACOB PETER. — Elected an Associate Member, 581.
 SAYERS, E. L., AND A. C. POLK. — Awarded the Thomas Fitch Rowland Prize, 66, 79.
 SCHARPENBERG, CHARLES CHRISTIAN. — Elected an Associate Member, 397.
 SCHEIDENHELM, F. W. — Paper by, 246; Discussion by, 307.
 SCHMUCKER, BEALE MELANCTHON. — Elected an Associate Member, 635.
 SCHOENBERGER, GEORGE CHRISTIAN. — Elected an Associate Member, 756.
 SCHOLTZ, H. F. — Discussion by, 310.
 SCHULTZ, HAROLD AUGUST HASTRUP. — Transferred to Grade of Associate Member, 398.
 SCOTT, LEWIS PELOT. — Elected an Associate Member, 400.
 SCUDDER, HENRY DARCY, JR. — Elected an Associate Member, 756.
 SEAMAN, HENRY B. — Discussion by, 754.

SEATTLE.

Seattle Association. — Abstract of Minutes of Meetings of, 147, 205, 258, 426, 427, 608; Report of Committee of, On Relations of Local Associations to the Society, etc., 587.

SECREST, THOMAS WILLIAM.—Elected an Associate Member, 309.

Secretary.—Report of, 20, 66, 78; Election of, 76; Report of, Relative to Removal of Library, 312; Report of, Relative to Cost of Paneling Rooms in Society's New Headquarters, 639; Report of, On Society's New Headquarters, 644, 667.

SEGURA, VALERIANO.—Transferred to Grade of Associate Member, 398.

SEIB, CHARLES BACH.—Transferred to Grade of Associate Member, 310.

SELL, WILLIAM OSBORNE.—Elected a Junior, 72.

SESSLER, GROVER CLEVELAND. — Elected an Associate Member, 71.

SEWARD, HAROLD CLINTON.—Elected a Junior, 72.

SEXTON, GEORGE FRANCIS.—Elected a Junior, 398.

SEXTON, JOHN RODERICK.—Elected an Associate Member, 247.

SHAFFER, IVAN OSCAR.—Elected an Associate Member, 635.

SHAILER, R. A.—Discussion by, 70.

SHARP, HERBERT MOORE.—Elected an Associate Member, 581.

SHARP, HOMER J.—Transferred to Grade of Associate Member, 583.

SHARPLES, P. P.—Discussion by, 69.

SHAW, CLARK H.—Paper by, 307.

SHAW, PERCY AUGUSTUS.—Transferred to Grade of Member, 401.

SHEA, WILLIAM EDWARD.—Elected a Junior, 398.

SHENEHON, F. C.—On Committee of Arrangements for Annual Convention, 252.

SHEPARD, GEORGE WILSON.—Elected an Associate Member, 400.

SHEPPERD, THOMAS SHACKELFORD.—Transferred to Grade of Member, 401.

SHERMAN, JAMES HILTON.—Elected an Associate Member, 397.

SHIBLEY, KENNETH.—Elected an Associate Member, 635.

SHIELDS.

SHIELDS, JAMES RALPH. — Transferred to Grade of Associate Member, 249.

SHIKLES, JAMES WALLACE.—Elected a Member, 580.

SHIMER, HARRY WOODWORTH. — Elected an Associate Member, 581.

SHIPLEY, ROBERT EARLE.—Elected an Associate Member, 635.

SIGLER, ELMER.—Elected an Associate Member, 397.

SILAGI, EUGENE ADALBERT.—Elected an Associate Member, 400.

SIMSON, DAVID.—Death announced, 399.

SISSOEFF, SERGEI NICOLAEVITCH.—Elected a Member, 246.

SLAYMAKER, CHARLES MONROE. — Elected an Associate Member, 309.

SLOANE, FRED MATHEWS.—Elected an Associate Member, 71.

SMALLMAN, RALPH ALCORN.—Transferred to Grade of Associate Member, 249.

SMITH, C. E.—Awarded the J. James R. Croes Medal, 66, 79.

SMITH, DONALD ABRAM.—Elected a Junior, 757.

SMITH, EARL AUDIE.—Transferred to Grade of Associate Member, 583.

SMITH, ELROY GEORGE.—Transferred to Grade of Associate Member, 310.

SMITH, JAMES LEO.—Elected a Junior, 72.

SMITH, MAXWELL WAIDE.—Elected an Associate Member, 309.

SMITH, RALPH ROBERT.—Elected a Junior, 757.

SMITH, ROBERT ALEXANDER CHIQUENO.—Elected an Associate, 581.

SMITH, ROY ELMER.—Transferred to Grade of Associate Member, 310.

SMITH, VICTOR CHARLES.—Elected an Associate Member, 247.

SMITH, W. F.—Discussion by, 2.

SMITH, WALTER GROVER.—Elected an Associate Member, 581.

SMITH, WILLIAM STUART.—Death announced, 73.

SMYTH, ARTHUR PORTER. — Transferred to Grade of Associate Member, 73.

SNEEDEN.

- SNEEDEN, JEAN-BAPTISTE OCTAVE.—Elected a Junior, 757.
- Society Headquarters.—Report of Secretary Relative to Cost of Paneling Rooms in, 639; Report of Secretary on, 644, 667.
- Society House.—Report of Executive Committee of Board of Direction on Sale or Lease of, 639.
- Society Items of Interest, 3, 124, 250, 315, 403, 584, 648, 759.
- Society, Officers of the.—Authorization by Board of Direction of Explanatory Foot-Note Relative to Salaries of, 75; Resolution of Board of Direction Relative to Recommendations to Office or Position by, 313.
- Society, Student Branches of the.—Resolution Relative to the, 68, 103.
- Soils for Foundations, etc., Special Committee to Codify Present Practice on the Bearing Value of.—Progress Report of, 67, 99; Report of Committee on Special Committees on Work of, and Appropriation for, 126; Minutes of Meetings of, 429.
- SONDEREGGER, A. L.—Paper by, 634.
- Southern California Association.—Abstract of Minutes of Meetings of, 9, 538, 687.
- SPALDING, WALTER JAMES.—Transferred to Grade of Member, 401.
- SPEAKMAN, RICHARD EDWARD.—Death announced, 583.
- SPEAR, ROY ELBERT.—Elected an Associate Member, 247.
- SPEAR, W. E.—Discussion by, 197.
- SPENCE, DAVID WENDEL.—Death announced, 530.
- SPENCER, HERBERT.—Discussion by, 69.
- SPERRY, AUSTIN RUSSELL WILLARD.—Transferred to Grade of Associate Member, 73.
- Spokane Association.—Abstract of Minutes of Meetings of, 149, 207, 428.
- SPRAGUE, HUGH MAX.—Elected an Associate Member, 581.
- SPILSBURY, E. GYBBON.—Address by, 754.
- STABLER, HERMAN. — Transferred to Grade of Member, 757.

STAEHLE.

- STAEHLE, GILBERT COBB. — Transferred to Grade of Associate Member, 758.
- Standards, American Engineering.—Appointment of Representatives of Society at Joint Conference on, 74; Report of Joint Committee on Organization of Committee on, 414.
- STANDISH, SEYMOUR.—Elected an Associate Member, 309.
- STANIFORD, CHARLES W.—Paper by, 199.
- STANTON, CHARLES BEECHER. — Elected a Member, 70.
- STANTON, WILLIAM LEWIS.—Elected a Junior, 401.
- STARKWEATHER, ALFRED KENNETH.—Transferred to Grade of Associate Member, 583.
- STARR, REX CAMERON.—Transferred to Grade of Member, 398.
- STAVA, WILLIAM. — Transferred to Grade of Associate Member, 637.
- STEARNS, FREDERIC P.—Presents Final Report of Special Committee on Valuation of Public Utilities, 67, 97.
- Steel Columns and Struts, Special Committee on.—Progress Report of, 67, 86; Report of Committee on Special Committees on Work of, and Appropriation for, 125; Minutes of Meetings of, 150, 432, 689; Resignation of Member of, Accepted 313; Appropriation for Work of, 639.
- STEELE, ISAAC CLEVELAND.—Elected an Associate Member, 397.
- STEINHAUSER, HARRY HERMAN. — Transferred to Grade of Associate Member, 249.
- STEINMAN, D. B.—Paper by, 753.
- STEM, CLIFFORD HOEY.—Elected a Junior, 309.
- STEPHENS, UEL.—Elected a Junior, 72.
- STERLING, GUY.—Elected a Member, 70.
- STERN, E. W.—Discussion by, 69, 70.
- STEVENS, E. A.—Discussion of, 69, 70.
- STEVENS, H. E.—On Committee of Arrangements for Annual Convention, 252.

STEVENS.

- STEVENS, JOHN F.—On Engineering Council, 644; Cable from, 645.
- STEVENS, SAMUEL SPAULDING. — Elected an Associate Member, 635.
- STEVENSON, MARKLEY.—Elected an Associate Member, 581.
- STOFFLET, HERBERT MILLER.—Elected an Associate Member, 635.
- STONE, SOLON JONES.—Elected a Member, 755.
- STOTT, HENRY GORDON.—Death announced, 73.
- STRACHAN, NORMAN FRASER. — Elected a Junior, 636.
- STRANEY, JOHN WILLIAM.—Elected an Associate Member, 581.
- STREHAN, GEORGE E., AND HAROLD PERRINE.—Awarded the Collingwood Prize, 66, 79.
- "Stress Measurements on the Hell Gate Arch Bridge," presented and discussed, 753.
- Stresses in Railroad Track, Special Committee on. — Progress Report of, 67, 100; Report of Committee on Special Committees on Work of, and Appropriation for, 127; Minutes of Meetings of, 260, 689; Resignation of Member of, Accepted, 313.
- STUART, EDWARD.—Elected an Associate Member, 635.
- STUART, F. L.—Discussion by, 70.
- Student Branches of the Society.—Resolution Relative to Establishment of, 68, 103.
- Students, Engineering.—Resolutions of Executive Committee Relative to Drafting or Enlistment of, 759.
- SUTTON, DAVID.—Elected an Associate Member, 756.
- SWAIN, GEORGE F.—On Engineering Council, 644.
- SWANKER, JOHN EDWARD.—Death announced, 637.
- SWANSON, WILLIAM ROBERT. — Elected a Junior, 401.
- SWAREN, JOHN WILLIAM.—Elected an Associate Member, 400.
- SWARTZ, LEON. — Transferred to Grade of Associate Member, 637.
- SWEETSER, ERNEST OSGOOD.—Elected an Associate Member, 756.
- SWEM, AMZI RAYMOND.—Elected an Associate Member, 309.

SWINTON.

- SWINTON, ROY STANLEY. — Transferred to Grade of Associate Member, 583.
- SYRETT, WALTER SUTTON.—Elected a Member, 580.
- TABER, ROCK GRANITE.—Elected an Associate Member, 400.
- TAKAHASHI, SEISUKE.—Elected an Associate Member, 71.
- TALBOT, ARTHUR N.—Presents Progress Report of Special Committee on Stresses in Railroad Track, 67, 100; Nominated as President, 603.
- TAMM, ALFRED.—Elected an Associate Member, 756.
- TANDROW, WALTER STEPHEN.—Elected an Associate Member, 71.
- TAPPAN, ROGER.—Death announced, 2.
- TATE, ROBERT L'HOMMEDIEU.—Transferred to Grade of Associate Member, 310.
- TAUSSIG, JOHN WRIGHT.—Transferred to Grade of Associate Member, 758.
- TAYLOR, ARTHUR.—Elected an Associate Member, 247.
- TAYLOR, GEORGE BLANEY.—Transferred to Grade of Associate Member, 249.
- TAYLOR, HAROLD ALEXANDER. — Elected an Associate Member, 309.
- TAYLOR, HENRY, AND WILLIAM G. GROVE.—Awarded the James Laurie Prize, 66, 79.
- TEIXEIRA DE MELLO, JOSÉ ALEXANDRE. —Elected a Junior, 636.
- THAXTON, RUFUS CARROLL.—Elected an Associate Member, 581.
- Tellers.—Appointment of, To Canvass Ballot for Officers, 65, 78; Report of, On Suggestions for Nominating Committee, 66, 79; Report of, On Ballot for Officers, 68, 110.
- "Tests of Concrete Specimens in Sea Water, at Boston Navy Yard", presented and discussed, 2.
- "The Activities of the American Society of Civil Engineers During the Past Twenty-five Years," presented, 754.
- "The Cape Cod Canal", presented and discussed, 583.

THE.

- "The Hell Gate Arch Bridge and Approaches of the New York Connecting Railroad Over the East River in New York City," presented and discussed, 753.
- "The Lock 12 Development of the Alabama Power Company, Coosa River, Alabama," Awarded the Thomas Fitch Rowland Prize, 66, 79.
- "The Possibilities in Bridge Construction by the Use of High-Alloy Steels," awarded the Norman Medal, 66, 79.
- "The Present Situation of the Great War," Address on, 245.
- "The Reconstruction of the Stony River Dam," presented and discussed, 246.
- "The Subsidence of Muck and Peat Soils in Southern Louisiana and Florida," presented and discussed, 637.
- "The Three 15-Cubic Yard Dipper-Dredges, *Gamboa*, *Paraiso*, and *Cascadas*, as Supplied and Used on the Panama Canal," presented and discussed, 579.
- "The Valuation of Land," presented and discussed, 1.
- "The Water Supply of Parkersburg, W. Va.," presented and discussed, 197.
- "The Work of the 22d N. Y. Engineers on the Mexican Border," Address on, 399.
- THOM, NEIL, JR.—Transferred to Grade of Associate Member, 402.
- THOMAS, CHARLES COFRAN HUBBARD.—Elected an Associate Member, 71.
- THOMAS, CHARLES RANDOLPH.—Transferred to Grade of Associate Member, 249.
- THOMAS, R. D.—On Committee of Arrangements for Annual Convention, 252.
- THOMPSON, SANFORD E.—Discussion by, 70.
- THOMSON, R. H.—Elected a Director, 69, 111.
- THOMSON, SAMUEL FORSYTHE.—Death announced, 73.
- THOMSON, T. KENNARD.—Presides at Meeting, 1; Discussion by, 2, 70, 197, 199, 308, 583, 633, 637; Address by, 754.

THOMSON.

- THOMSON, WILLIAM STEWART.—Elected a Member, 246.
- THORNTON, LOUIS EARLE.—Elected an Associate Member, 400.
- TIBBETTS, FREDERICK HORACE.—Transferred to Grade of Member, 582.
- TIDD, HARRY.—Transferred to Grade of Associate Member, 583.
- TILLSON, GEORGE W.—Presents Progress Report of Special Committee on Materials for Road Construction, 67, 84; Elected Treasurer, 69, 111; Presides at Meeting, 69; Discussion by, 70; On Committee on Special Committees, 76; Nominated as Treasurer, 603.
- TINKER, GEORGE H.—Discussion by, On Relations of Local Associations to the Society, etc., 585.
- TINKHAM, S. E.—On Committee to Recommend the Award of Prizes, 645.
- TINSLEY, ROBERT BRUCE.—Transferred to Grade of Member, 636.
- TOLMAN, EDWARD MAYO.—Transferred to Grade of Associate Member, 583.
- TOPPING, PERRY.—Transferred to Grade of Member, 582.
- TORPEN, BERNHARDT E.—Elected an Associate Member, 309.
- Treasurer.—Report of, 23, 66, 78.
- TRETEN, OTTO CHRISTIAN.—Elected an Associate Member, 397.
- TROST, ADOLPHUS GUSTAVUS.—Transferred to Grade of Member, 401.
- TROST, PAUL ANTHONY.—Elected a Member, 399.
- TROTT, DAVID CROOKER.—Transferred to Grade of Member, 582.
- TRUEHEART, EDWARD GARLAND.—Elected a Member, 246.
- TRUEDELL, STEPHEN RIGGS.—Elected a Junior, 636.
- TULLOCK, HUBERT SOUTHWICK.—Transferred to Grade of Member, 401.
- TURNER, NATHANIEL PARKER.—Transferred to Grade of Member, 582.
- TUTTLE, ARTHUR S.—On Committee of Arrangements for Annual Meeting, 761.
- TYSON, WILLIAM CLAUDE.—Elected an Associate Member, 397.

UNITED.

"UNUSUAL.

- United Engineering Building. — "Unusual Coffor-Dam for 1 000-Foot Pier, New York City", presented and discussed, 199.
- Utah Association. — Abstract of Minutes of Meetings of, 428.
- United Engineering Society.—Appointment of Representative of Society on Board of, 74; Terms of Representatives of Society on, Fixed, 74; Appointment of Representatives of Society on Library Board of, 76; Telegram from, To President of the United States, Supporting International Policy and Offering Assistance toward Organization of Engineers for Service, 135; Extracts from Annual Report of President of, 250; Resolution Relative to Transfer of Ownership of Library of Society to, 312; Amendments to By-Laws of, Relative to Formation of Engineering Council, 312, 342; Resolutions Relative to Representation of, On Engineering Council, 312; Accessions to Library of, 436, 541, 612, 692, 771.
- United States Coast and Geodetic Survey.—Letter from, Relative to Status of Personnel of, 403.
- United States Department of Commerce.—Letter from Secretary of, Relative to Economy in Food Resources of Country, 313, 333.
- United States Military Service. — Resolution of Executive Committee of Board of Direction Relative to Remittance of Dues of Members in, 639.
- United States Ordnance Department. —Request of, For Mechanical Draftsmen, 632.
- United States, President of.—Telegram to, From National Engineering Societies and United Engineering Society, Supporting International Policy and Offering Assistance toward Organization of Engineers for Service, 135; Letter from, Relative to Cablegram from Central Board, Engineers Ways of Communication of Russia, 645.
- VALUE, BEVERLY R.—On Committee of Arrangements for Annual Meeting, 761.
- VAN AMBURGH, THOMAS ALBERT. — Elected an Associate Member, 397.
- VAN AUKEN, CLAUDE LINN.—Elected an Associate Member, 397.
- VAN BUREN, MAURICE PELHAM. — Elected a Junior, 72.
- VAN DEN BROEK, JOHN ABRAHAM. —Elected an Associate Member, 635.
- VAN ORNUM, J. L.—On Committee to Recommend the Award of Prizes, 645.
- VAN SISE, ANDREW JACKSON. — Elected a Junior, 72.
- VANSITTART, GEORGE EDWARD.—Death announced, 2.
- VAN VLIET, GEORGE PARKER.—Elected an Associate Member, 397.
- VAN WINKLE, ROBERT NEEL.—Elected an Associate Member, 756.
- VARNEY, HENRY ALDIS.—Elected a Member, 308.
- VAUGHAN, JOHN FAIRFIELD.—Elected a Member, 246.
- VENSANO, H. C.—Paper by, 637.
- VERNER, JULIUS.—Elected an Associate Member, 635.
- VEUVE, ERLE LEROY.—Death announced, 311.
- VOETSCH, CARL.—Elected a Member, 755.
- VOGDEN, JOSEPH JOHNSON.—Elected an Associate Member, 635.
- VOGEL, JOSHUA HOLMES.—Elected an Associate Member, 581.
- VOLK, WENDELL DOUGLAS.—Elected an Associate Member, 581.
- VON LEER, ISAAC WAYNE.—Death announced, 2.
- VON SCHRENK, H.—Discussion by, 395.
- WACHTEL, LOUIS.—Death announced, 637.

WADDELL.

- WADDELL, J. A. L.—Awarded the Norman Medal, 66, 79; Discussion by, 754.
- WADE, JEPHTHA A.—Elected an Associate Member, 756.
- WAGNER, SAMUEL TOBIAS.—Nominated as Director, 603.
- WAITE, EARLE CHESTER.—Transferred to Grade of Associate Member, 758.
- WALKER, J. S.—Discussion by, 1.
- WALKER, LESTER CARL.—Elected an Associate Member, 397.
- WALKER, W. T.—On Committee of Arrangements for Annual Convention, 252.
- WALKER, WATSON FRANK.—Elected a Junior, 72.
- WALL, EDWARD E.—Nominated as Director, 603.
- WALLACE, DAVID ALEXANDER.—Elected an Associate Member, 247.
- WALLACE, EDWARD EWING.—Elected an Associate Member, 581.
- WALLACE, JOHN CLOYD.—Elected an Associate Member, 581.
- WALLER, JOHN MALCOLM.—Transferred to Grade of Associate Member, 402.
- WALTON, HARRISON BILLINGSLEY.—Elected an Associate Member, 635.
- WAND, ANTHONY WILLIAM.—Elected an Associate Member, 581.
- War Revenue Act of 1917.—Resolutions Adopted by the Executive Committee of the Board of Direction Relative to, 672.
- WARD, GEORGE SPARKMAN.—Transferred to Grade of Associate Member, 73.
- WARD, HERBERT KIRKMAN.—Elected an Associate Member, 397.
- WARD, JASPER DUDLEY.—Elected an Associate Member, 247.
- WARD, LYMAN WISE.—Elected an Associate Member, 309.
- WARNER, JACOB LATCH.—Elected a Member, 396.
- WARREN, HORACE PRETTYMAN.—Transferred to Grade of Member, 310.
- WARREN, LEE GILBERT.—Elected an Associate Member, 397.

WARREN.

- WARREN, MINTON MACHADO.—Transferred to Grade of Associate Member, 398.
- WARWICK, CHARLES LAWRENCE.—Elected a Junior, 401.
- "Washington Award".—Appointment of Representatives of Society on Board of, 312.
- Water Power Development Conference.—Appointment of Representatives of Society to, 74.
- Water Wheels, Code for Testing of.—Letter from American Society of Mechanical Engineers Relative to Appointment of Representatives to Assist in Framing of, 644.
- WATERBURY, L. A.—Discussion by, 754.
- WATERMAN, EARLE LYTTON.—Elected an Associate Member, 581.
- WATKINS, GUY ANDERSON.—Transferred to Grade of Member, 401.
- WATSON, CARL HAWLEY.—Elected an Associate Member, 71.
- WATSON, GEORGE LINTON.—Elected an Associate Member, 71.
- WEBB, FRANK KLINE.—Elected an Associate Member, 400.
- WEBER, WALTER RAYMOND.—Elected a Junior, 398.
- WEBSTER, GEORGE S.—Elected a Vice-President, 69, 111.
- WEBSTER, MAURICE ANDERSON.—Transferred to Grade of Associate Member, 398.
- WEED, FREDERICK HARRISON.—Elected a Junior, 582.
- WEEKES, CLIFTON L'ORIGNAL.—Elected a Junior, 636.
- WEGMANN, EDWARD.—Discussion by, 246, 307.
- WEINER, PETER.—Elected an Associate Member, 581.
- WEISS, ANDREW.—Transferred to Grade of Member, 310.
- WELLER, JOHN HENRY.—Elected an Associate Member, 71.
- WELLS, FRANK HARRIS.—Elected an Associate Member, 309.
- WELLS, HARRY ARTEMAS.—Elected an Associate Member, 397.
- WELTON, NELSON JAMES.—Death announced, 758.
- WENDELL, EDWARD WILLOUGHBY.—Elected an Associate Member, 247.

WENDT.

- WENDT, WYLIE BRODBECK.—Elected an Associate Member, 635.
- WENTWORTH, C. A.—Discussion by, 199.
- Western Society of Engineers.—Appointment of Representatives of the Society on Board of "Washington Award", At Request of, 312.
- WESTON, EDMUND BROWNELL. — Death announced, 2.
- WHINERY, SAMUEL.—Discussion by, 69, 70.
- WHITCOMB, RALPH NIMS.—Elected a Member, 396.
- WHITE, DAVID MILLER.—Death announced, 2.
- WHITE, FRANK GEORGE.—Transferred to Grade of Member, 248.
- WHITE, LAZARUS.—Discussion by, 70.
- WHITNEY, PARKER RICHARDS. — Elected an Associate, 71.
- WHITWELL, EDWARD.—Discussion by, 69, 70; Elected an Associate Member, 756.
- WICH, BERNARD.—Elected an Associate Member, 71.
- WIEDEMAN, HERMAN FREDERICK. — Elected an Associate Member, 635.
- WIGGIN, THOMAS H.—Discussion by, 70, 199.
- WILEY, A. J.—Discussion by, 529.
- WILLIAMS, ALEXANDER DENNIS. — Elected an Associate Member, 581.
- WILLIAMS, HOWARD STEPHEN. — Elected an Associate Member, 581.
- WILLIAMS, MAURICE WILLIAM. — Transferred to Grade of Member, 401.
- WILLIAMS, WILLIAM HORACE. — Transferred to Grade of Member, 401.
- WILLIAMSON, LEE HOOMES.—Elected a Junior, 636.

WILLIAMSON.

- WILLIAMSON, S. B.—Discussion by, 2.
- WILSON, GEORGE L.—On Committee of Arrangements for Annual Convention, 252.
- WILSON, LOUIS ARTHUR.—Elected an Associate Member, 756.
- WINN, HARRY STRONG.—Transferred to Grade of Associate Member, 637.
- WOLF, WILLIAM CHARLES.—Elected an Associate Member, 756.
- WOLFF, L. P.—On Committee of Arrangements for Annual Convention, 252.
- WOODWORTH, CLIFFORD ASHER. — Elected an Associate Member, 309.
- WORCESTER, J. R.—Presents Final Report of Special Committee on Concrete and Reinforced Concrete, 67, 86.
- WRIGHT, CLAUDE RICHARD.—Elected an Associate Member, 309.
- WRIGHT, EDWARD THOMAS.—Death announced, 311.
- WRIGHT, HERBERT JAMES.—Elected an Associate Member, 397.
- WRIGHT, JESSE CLARK.—Transferred to Grade of Member, 757.
- WYNN, WESLEY AKERS.—Transferred to Grade of Member, 310.
- YATES, J. J.—Discussion by, 2.
- YATES, WILLIAM H.—Appointed to Represent Society at Water Power Development Conference, 74.
- YEO, WILLIAM ALBERT.—Transferred to Grade of Associate Member, 758.
- YOLTON, ROBERT ELGENE.—Elected an Associate Member, 309.
- YOUMANS, GEORGE LELAND.—Transferred to Grade of Associate Member, 402.
- YOUNG, CHARLES ASA DILTS.—Transferred to Grade of Member, 310.

